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(12) **United States Patent**
Vemuri et al.

(10) **Patent No.: US 9,177,445 B2**
(45) **Date of Patent: Nov. 3, 2015**

(54) **TOURNAMENT GAMING SYSTEMS AND ADMINISTRATION SERVER**

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(73) Assignee: **Bally Gaming, Inc.**, Las Vegas, NV (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1566 days.

(21) Appl. No.: **12/619,614**

(22) Filed: **Nov. 16, 2009**

(65) **Prior Publication Data**

US 2010/0113162 A1 May 6, 2010

Related U.S. Application Data

(63) Continuation-in-part of application No. 12/268,288, filed on Nov. 10, 2008.

(60) Provisional application No. 60/987,062, filed on Nov. 10, 2007.

(51) **Int. Cl.**
G07F 17/00 (2006.01)
G07F 17/32 (2006.01)

(52) **U.S. Cl.**
CPC ***G07F 17/3267*** (2013.01)

(58) **Field of Classification Search**
USPC 463/16
See application file for complete search history.

(56) **References Cited**

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2007/0293293	A1 *	12/2007	Baerlocher et al.	463/16

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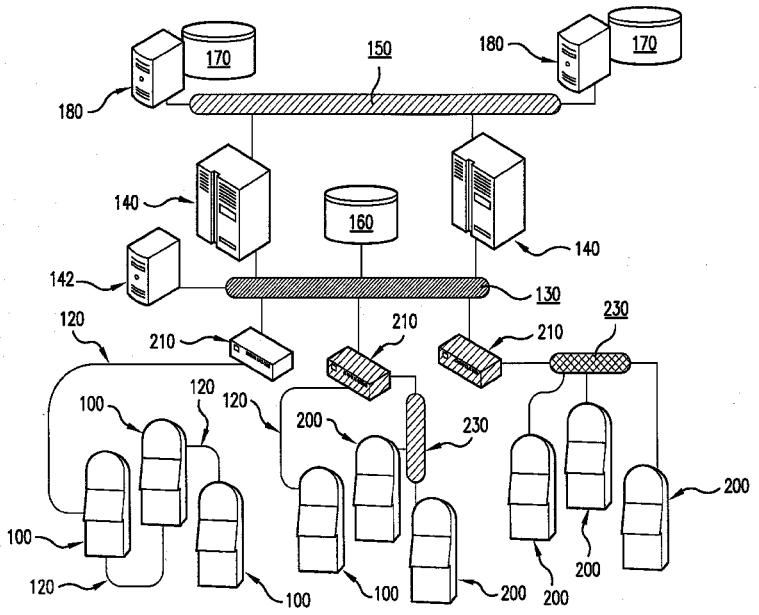
Primary Examiner — Reginald Renwick
(74) *Attorney, Agent, or Firm* — Brooke W. Quist; Marvin A. Hein; Philip J. Anderson

(57) **ABSTRACT**

Various embodiments are directed to gaming systems, gaming devices, and methods for presenting tournament games. According to one embodiment, a tournament gaming system, includes a plurality of gaming machines connected to a network, a tournament administration server, a tournament session server, a session service, and a session database. The tournament session server uses message stream classes and acts as a link between the tournament administration server and the gaming machines. Additionally, the tournament session server registers with the tournament administration server, wherein upon successful registration, the tournament administration server sends tournament messages to gaming machines via the tournament session server. The session service includes transport libraries. Preferably, the transport libraries use pre-configured socket ports for communication, and the session service registers with the libraries to send and receive messages to gaming machines. Typically, the session database is operable for data storage.

13 Claims, 122 Drawing Sheets



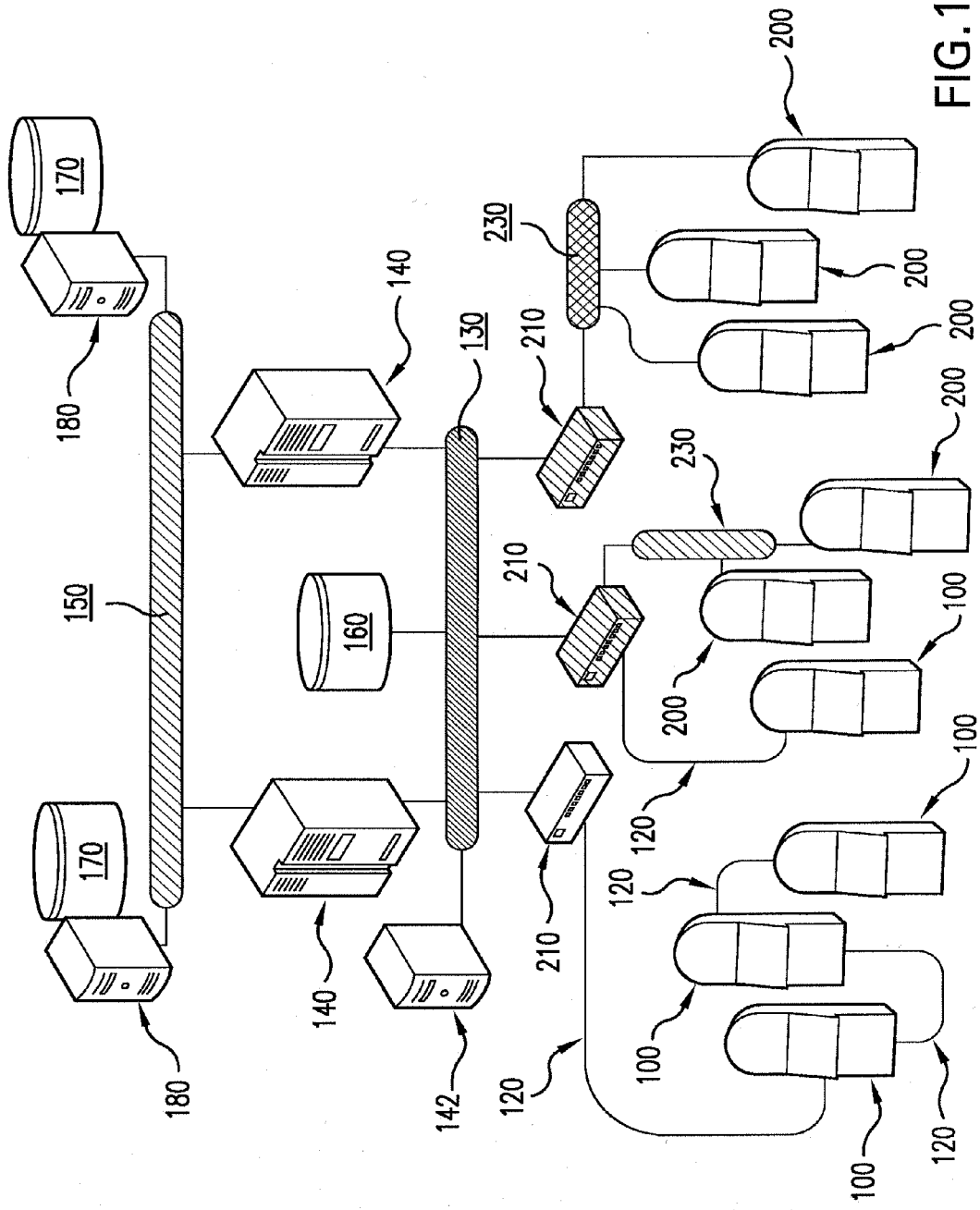


FIG. 1

Pyramid Tournament Setup

Level #	1	2	3...
Tourn Name	Hourly Base	Daily–base	Weekly–base
Length of Time	60 min	24 hour	Weekly
Tourn End Time	N/A	top of hour	Midnight
Cost to Play	$.01	$.01	$.01
# of Winners	10	10	2
# of People to advance	10	10	10
Inactivity time	0	1 day	1 day
Tourn Start time	top of hour	top of hour	top of hour
Type	Time	Time	Time
Sprint Score			
% of cost to Limited Entry pot	50%	50%	50%
% of cost to Level 1 prog.	10%	10%	0%
% of cost to Level 2 prog.	10%	10%	0%
% of cost to Level 3 prog.	10%	10%	30%
% of cost to Level 4 prog.	10%	10%	10%
% of cost to Level 5 prog.	10%	10%	10%

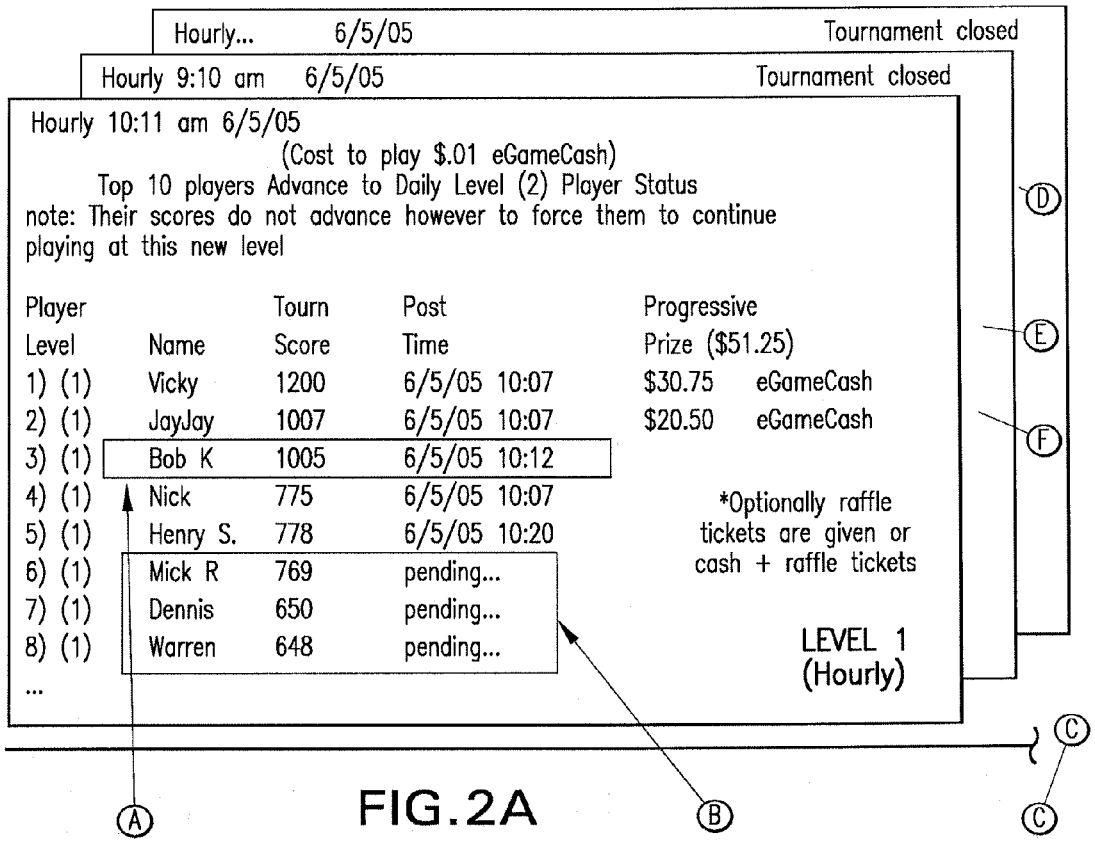


FIG.2A

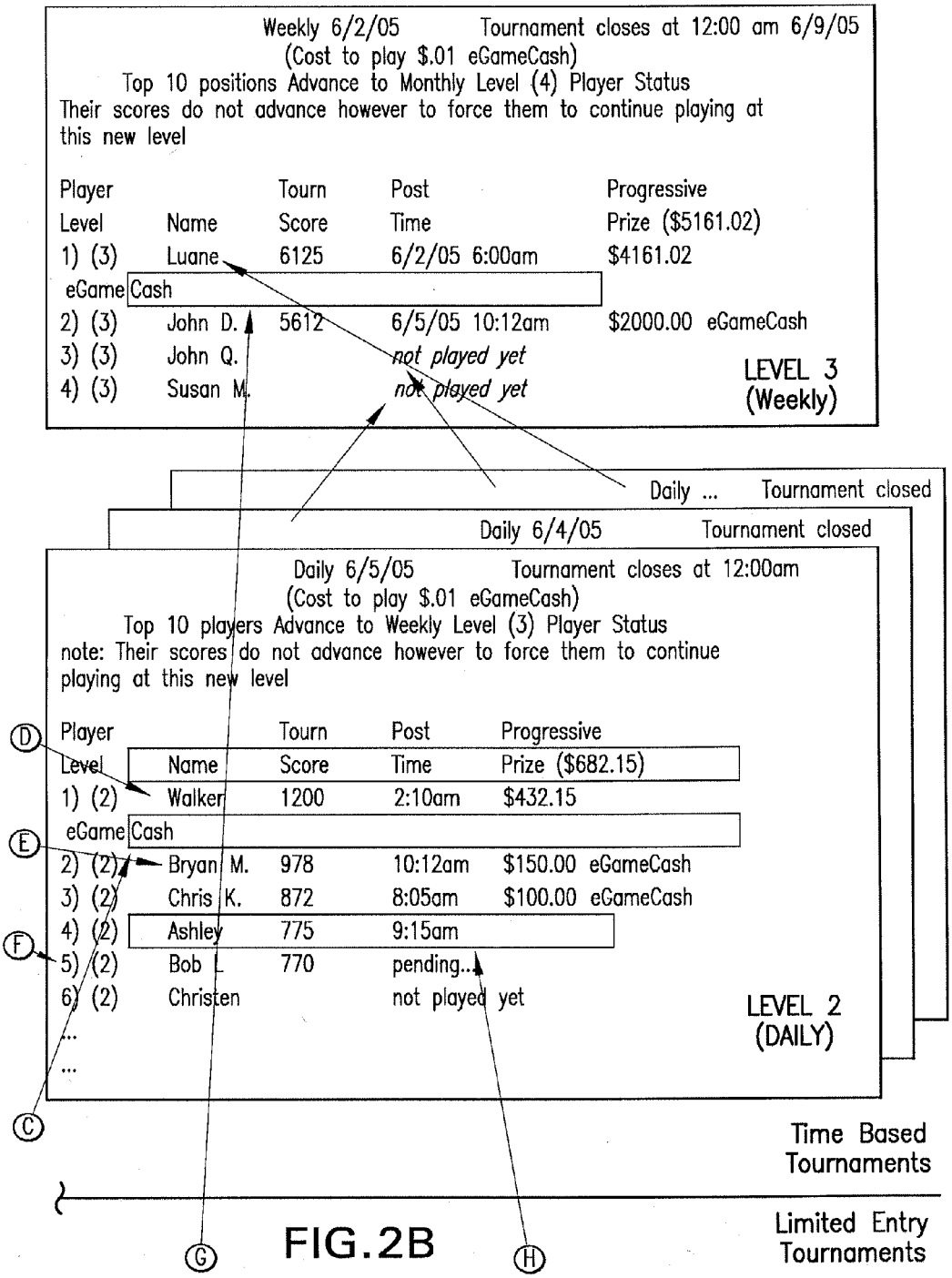

Weekly 6/2/05 Tournament closes at 12:00 am 6/9/05
(Cost to play $.01 eGameCash)
Top 10 positions Advance to Monthly Level (4) Player Status
Their scores do not advance however to force them to continue playing at this new level
Player Level Name Tourn Score Post Time Progressive Prize ($5161.02)
1) (3) Luane 6125 6/2/05 6:00am $4161.02
eGame Cash
2) (3) John D. 5612 6/5/05 10:12am $2000.00 eGameCash
3) (3) John Q. not played yet
4) (3) Susan M. not played yet
LEVEL 3 (Weekly)
Daily ... Tournament closed
Daily 6/4/05 Tournament closed
Daily 6/5/05 Tournament closes at 12:00am
(Cost to play $.01 eGameCash)
Top 10 players Advance to Weekly Level (3) Player Status
note: Their scores do not advance however to force them to continue playing at this new level
Player Level Name Tourn Score Post Time Progressive Prize ($682.15)
1) (2) Walker 1200 2:10am $432.15
eGame Cash
2) (2) Bryan M. 978 10:12am $150.00 eGameCash
3) (2) Chris K. 872 8:05am $100.00 eGameCash
4) (2) Ashley 775 9:15am
5) (2) Bob L 770 pending...
6) (2) Christen not played yet
...
...
LEVEL 2 (DAILY)
Time Based Tournaments
Limited Entry Tournaments
C
D
E
F
G
H

FIG.2B

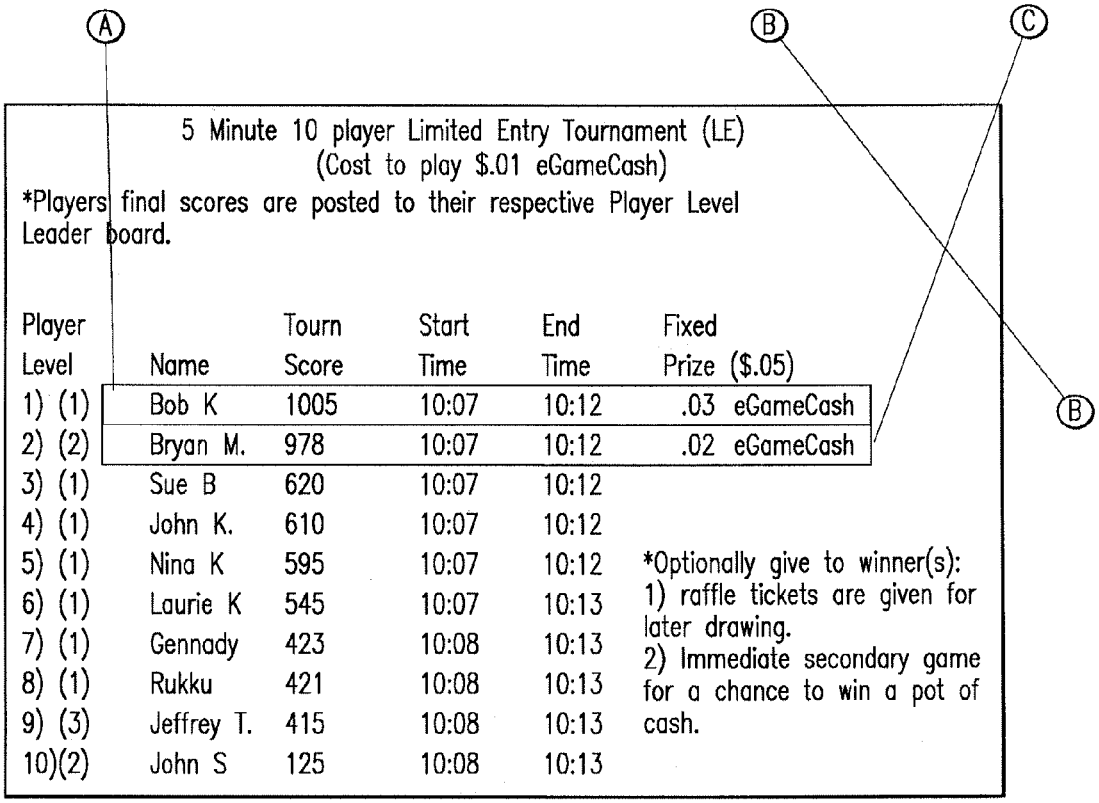
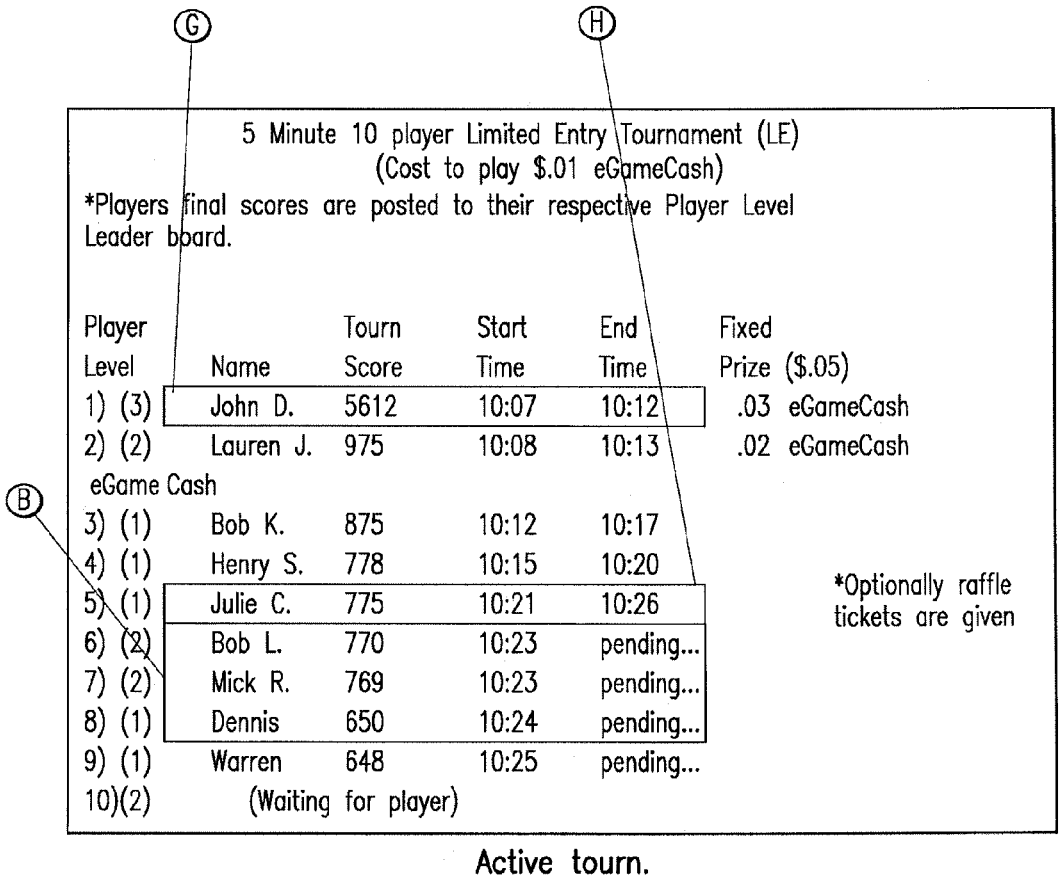

A
B
C
B
5 Minute 10 player Limited Entry Tournament (LE)
(Cost to play $.01 eGameCash)
*Players final scores are posted to their respective Player Level Leader board.
Player Level | Name | Tourn Score | Start Time | End Time | Fixed Prize ($.05)
1) (1) | Bob K | 1005 | 10:07 | 10:12 | .03 eGameCash
2) (2) | Bryan M. | 978 | 10:07 | 10:12 | .02 eGameCash
3) (1) | Sue B | 620 | 10:07 | 10:12
4) (1) | John K. | 610 | 10:07 | 10:12
5) (1) | Nina K | 595 | 10:07 | 10:12
6) (1) | Laurie K | 545 | 10:07 | 10:13
7) (1) | Gennady | 423 | 10:08 | 10:13
8) (1) | Rukku | 421 | 10:08 | 10:13
9) (3) | Jeffrey T. | 415 | 10:08 | 10:13
10)(2) | John S | 125 | 10:08 | 10:13
*Optionally give to winner(s):
1) raffle tickets are given for later drawing.
2) Immediate secondary game for a chance to win a pot of cash.
Just finished tourn.
When all places fill in first tournament then next LE tournament begins automatically

FIG.2C



Active tourn.

FIG. 2D

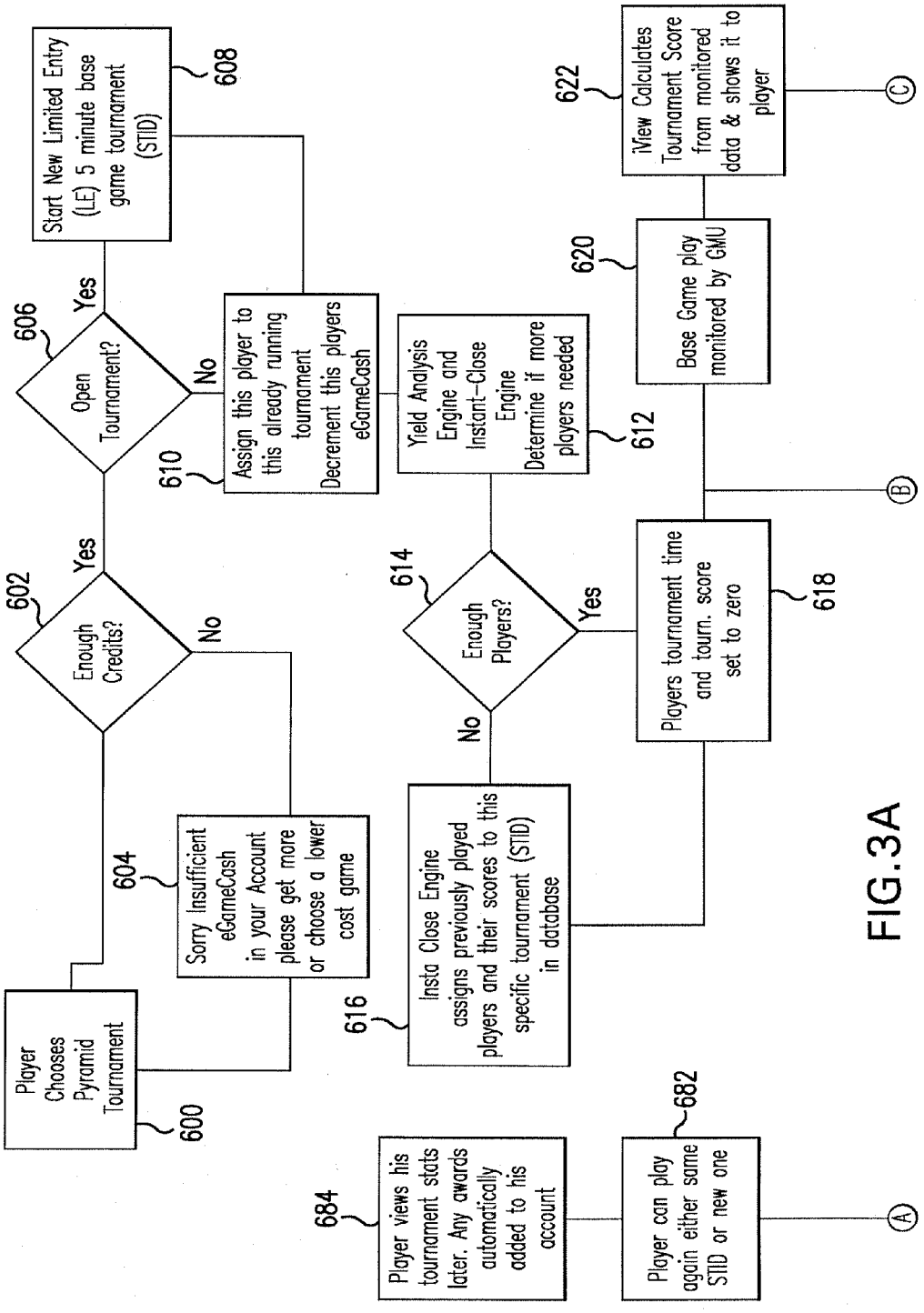

Player Chooses Pyramid Tournament
600
Enough Credits?
602
Yes
No
Sorry Insufficient eGameCash in your Account please get more or choose a lower cost game
604
Open Tournament?
606
Yes
No
Start New Limited Entry (LE) 5 minute base game tournament (STID)
608
Assign this player to this already running tournament Decrement this players eGameCash
610
Enough Players?
614
Yes
No
Yield Analysis Engine and Instant-Close Engine Determine if more players needed
612
Insta Close Engine assigns previously played players and their scores to this specific tournament (STID) in database
616
Players tournament time and tourn. score set to zero
618
Base Game play monitored by GMU
620
iView Calculates Tournament Score from monitored data & shows it to player
622
Player can play again either same STID or new one
682
Player views his tournament stats later. Any awards automatically added to his account
684
A
B
C

FIG.3A

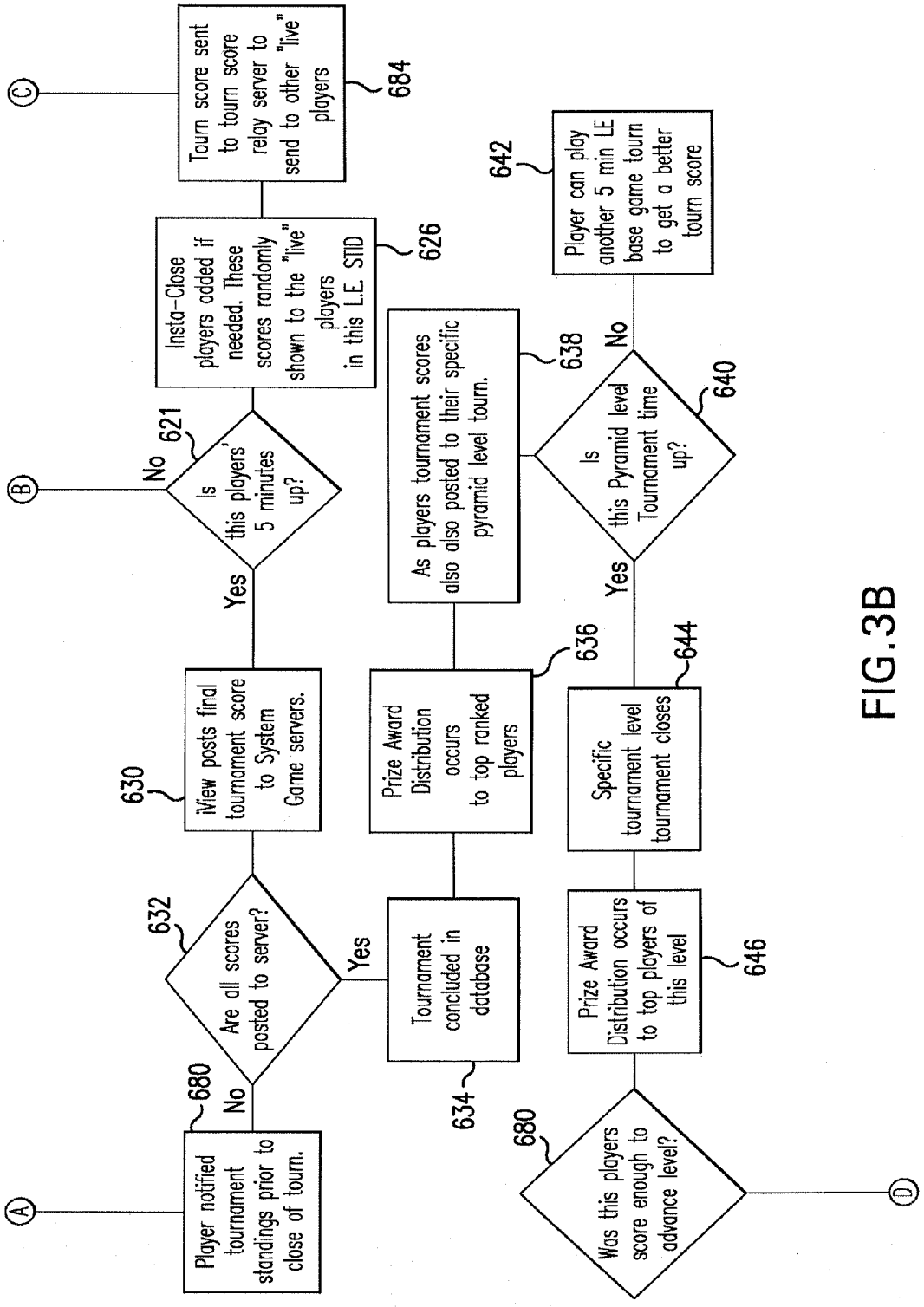

Player notified tournament standings prior to close of tourn.
680
No
Are all scores posted to server?
632
Yes
iView posts final tournament score to System Game servers.
630
No
Is this players' 5 minutes up?
621
Yes
Insta-Close players added if needed. These scores randomly shown to the "live" players in this L.E. STID
626
Tourn score sent to tourn score relay server to send to other "live" players
684
Tournament concluded in database
634
Prize Award Distribution occurs to top ranked players
636
As players tournament scores also also posted to their specific pyramid level tourn.
638
No
Is this Pyramid level Tournament time up?
640
Yes
Player can play another 5 min LE base game tourn to get a better tourn score
642
Specific tournament level tournament closes
644
Prize Award Distribution occurs to top players of this level
646
Was this players score enough to advance level?
680
A
B
C
D

FIG.3B

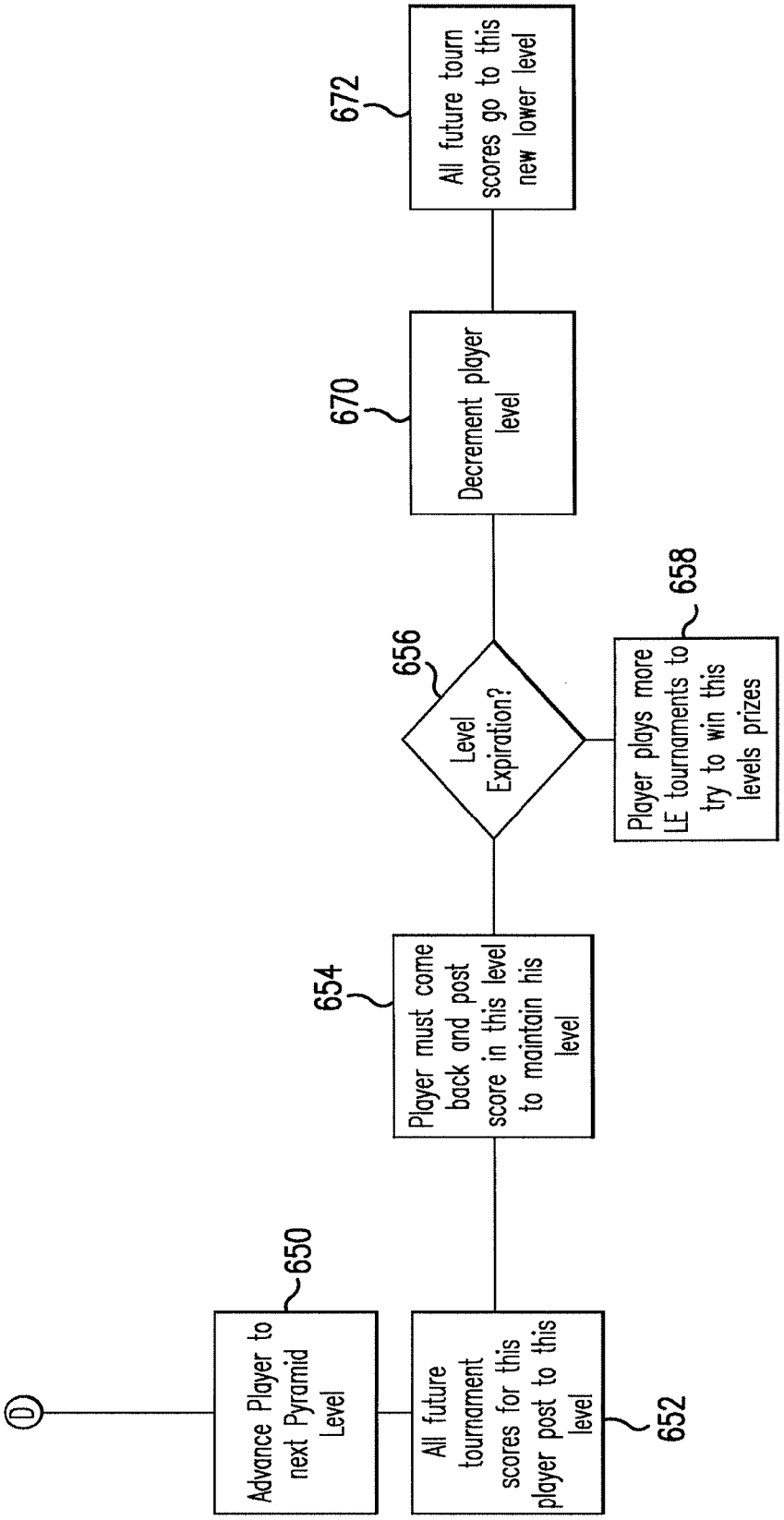

D
Advance Player to next Pyramid Level
650
All future tournament scores for this player post to this level
652
Player must come back and post score in this level to maintain his level
654
Level Expiration?
656
Player plays more LE tournaments to try to win this levels prizes
658
Decrement player level
670
All future tourn scores go to this new lower level
672

FIG.3C

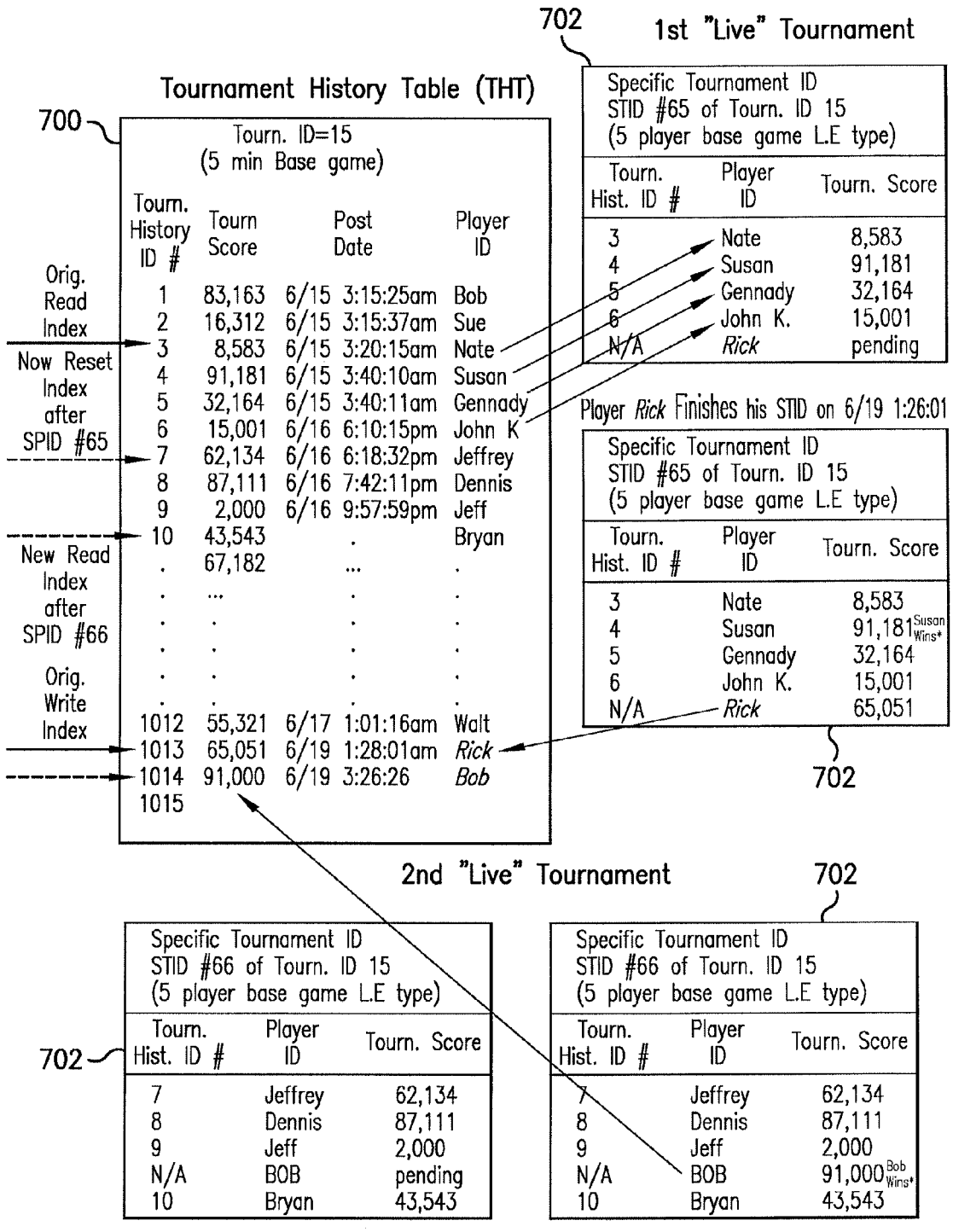

Tournament History Table (THT)
700
Tourn. ID=15
(5 min Base game)
Tourn. History ID #
Tourn Score
Post Date
Player ID
Orig. Read Index
Now Reset Index after SPID #65
New Read Index after SPID #66
Orig. Write Index
1 83,163 6/15 3:15:25am Bob
2 16,312 6/15 3:15:37am Sue
3 8,583 6/15 3:20:15am Nate
4 91,181 6/15 3:40:10am Susan
5 32,164 6/15 3:40:11am Gennady
6 15,001 6/16 6:10:15pm John K
7 62,134 6/16 6:18:32pm Jeffrey
8 87,111 6/16 7:42:11pm Dennis
9 2,000 6/16 9:57:59pm Jeff
10 43,543 . Bryan
. 67,182 ... .
1012 55,321 6/17 1:01:16am Walt
1013 65,051 6/19 1:28:01am Rick
1014 91,000 6/19 3:26:26 Bob
1015
702
1st "Live" Tournament
Specific Tournament ID
STID #65 of Tourn. ID 15
(5 player base game L.E type)
Tourn. Hist. ID #
Player ID
Tourn. Score
3 Nate 8,583
4 Susan 91,181
5 Gennady 32,164
6 John K. 15,001
N/A Rick pending
Player Rick Finishes his STID on 6/19 1:26:01
Specific Tournament ID
STID #65 of Tourn. ID 15
(5 player base game L.E type)
Tourn. Hist. ID #
Player ID
Tourn. Score
3 Nate 8,583
4 Susan 91,181 Susan Wins*
5 Gennady 32,164
6 John K. 15,001
N/A Rick 65,051
702
2nd "Live" Tournament
702
Specific Tournament ID
STID #66 of Tourn. ID 15
(5 player base game L.E type)
Tourn. Hist. ID #
Player ID
Tourn. Score
7 Jeffrey 62,134
8 Dennis 87,111
9 Jeff 2,000
N/A BOB pending
10 Bryan 43,543
Specific Tournament ID
STID #66 of Tourn. ID 15
(5 player base game L.E type)
Tourn. Hist. ID #
Player ID
Tourn. Score
7 Jeffrey 62,134
8 Dennis 87,111
9 Jeff 2,000
N/A BOB 91,000 Bob Wins*
10 Bryan 43,543

FIG.4

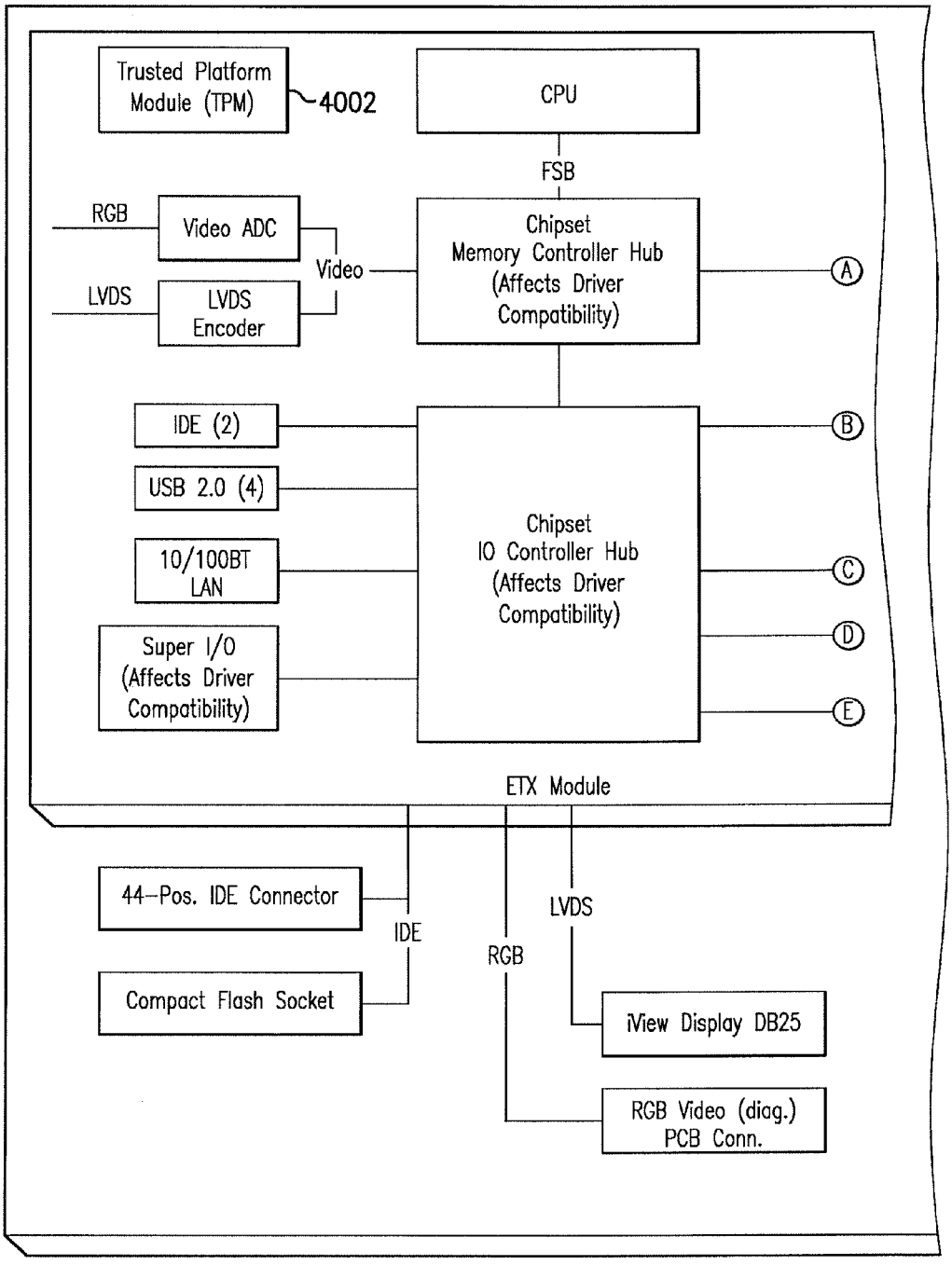

Trusted Platform Module (TPM)
4002
CPU
FSB
RGB
Video ADC
LVDS
LVDS Encoder
Video
Chipset Memory Controller Hub (Affects Driver Compatibility)
A
IDE (2)
USB 2.0 (4)
10/100BT LAN
Super I/O (Affects Driver Compatibility)
Chipset IO Controller Hub (Affects Driver Compatibility)
B
C
D
E
ETX Module
44-Pos. IDE Connector
Compact Flash Socket
IDE
RGB
LVDS
iView Display DB25
RGB Video (diag.) PCB Conn.

FIG.5A

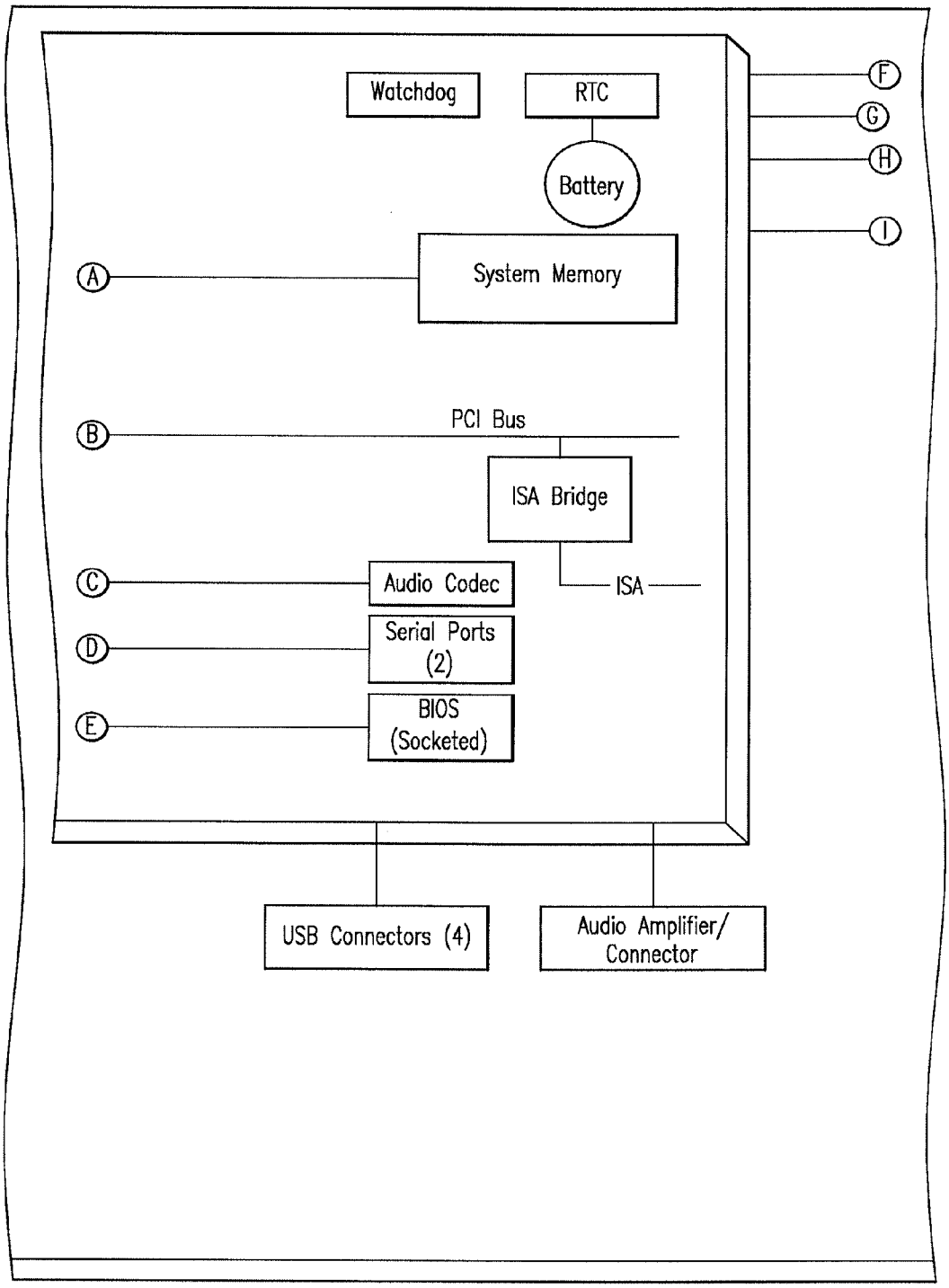

Watchdog
RTC
Battery
System Memory
PCI Bus
ISA Bridge
ISA
Audio Codec
Serial Ports (2)
BIOS (Socketed)
USB Connectors (4)
Audio Amplifier/ Connector
A
B
C
D
E
F
G
H
I

FIG.5B

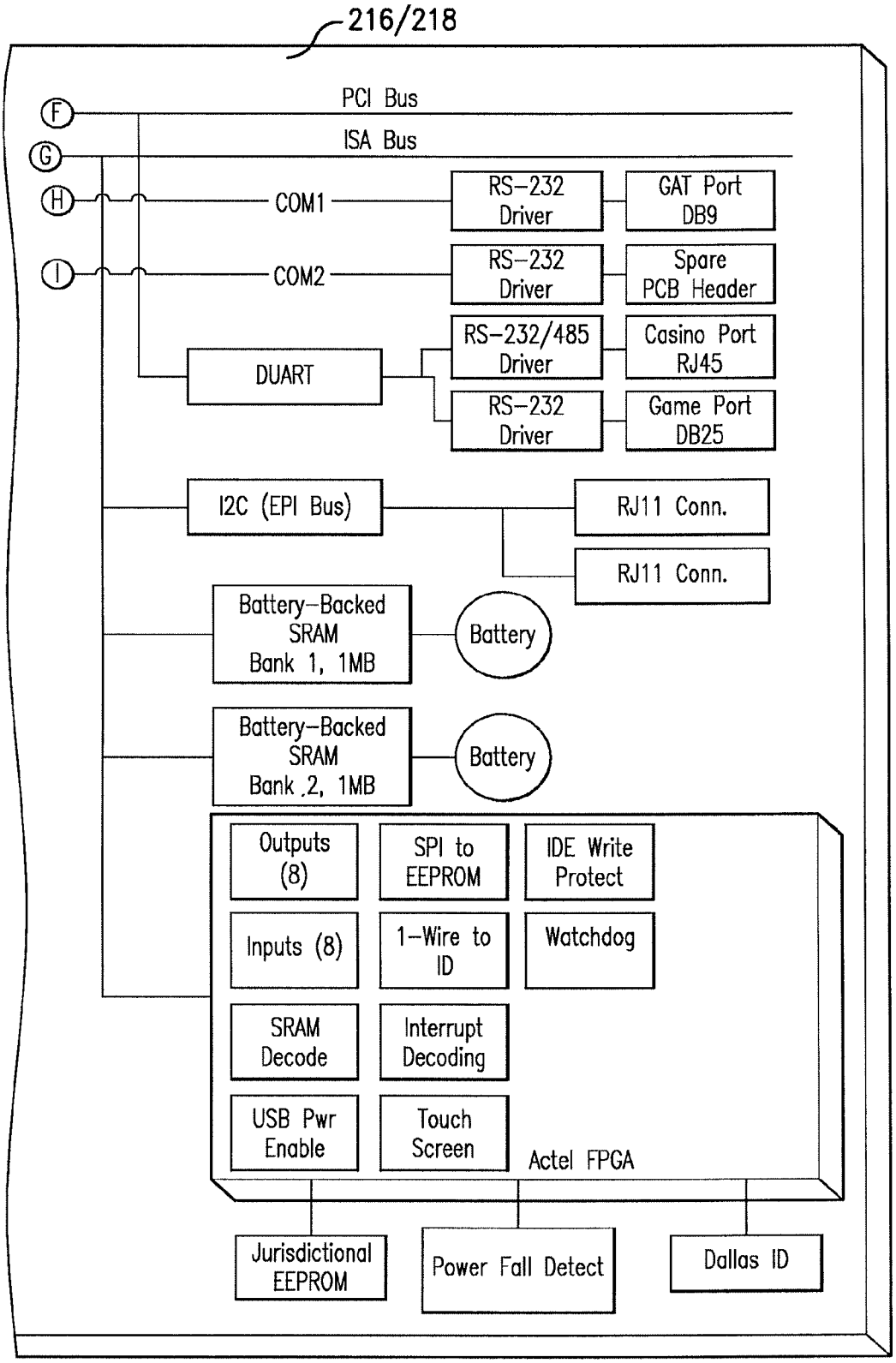

216/218
F
PCI Bus
G
ISA Bus
H
COM1
RS-232 Driver
GAT Port DB9
I
COM2
RS-232 Driver
Spare PCB Header
DUART
RS-232/485 Driver
Casino Port RJ45
RS-232 Driver
Game Port DB25
I2C (EPI Bus)
RJ11 Conn.
RJ11 Conn.
Battery-Backed SRAM Bank 1, 1MB
Battery
Battery-Backed SRAM Bank 2, 1MB
Battery
Outputs (8)
SPI to EEPROM
IDE Write Protect
Inputs (8)
1-Wire to ID
Watchdog
SRAM Decode
Interrupt Decoding
USB Pwr Enable
Touch Screen
Actel FPGA
Jurisdictional EEPROM
Power Fail Detect
Dallas ID

FIG.5C

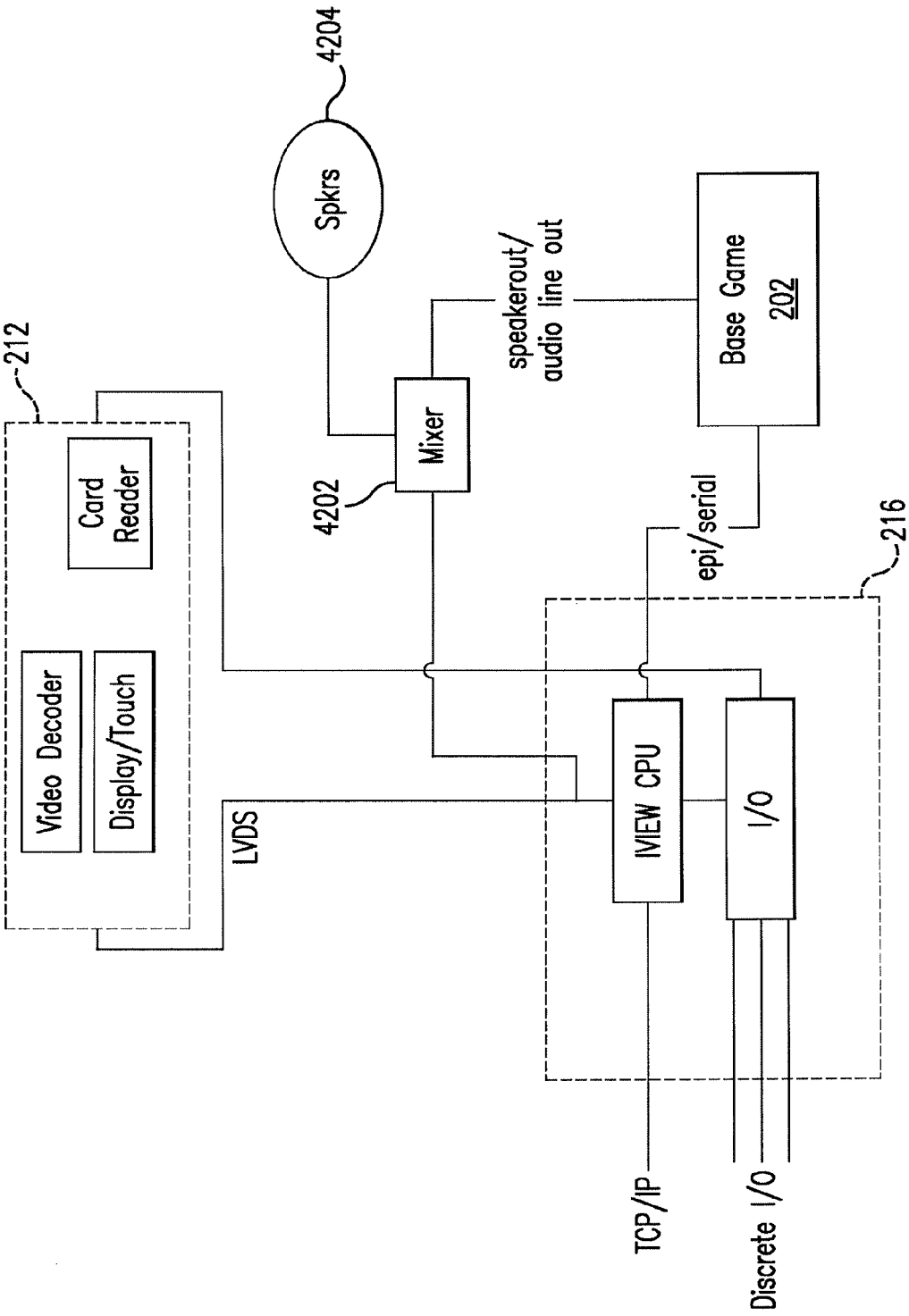

4204
Spkrs
speakerout/
audio line out
Base Game
202
212
Mixer
4202
Card
Reader
epi/serial
216
Video Decoder
Display/Touch
IVIEW CPU
I/O
LVDS
TCP/IP
Discrete I/O

FIG.6

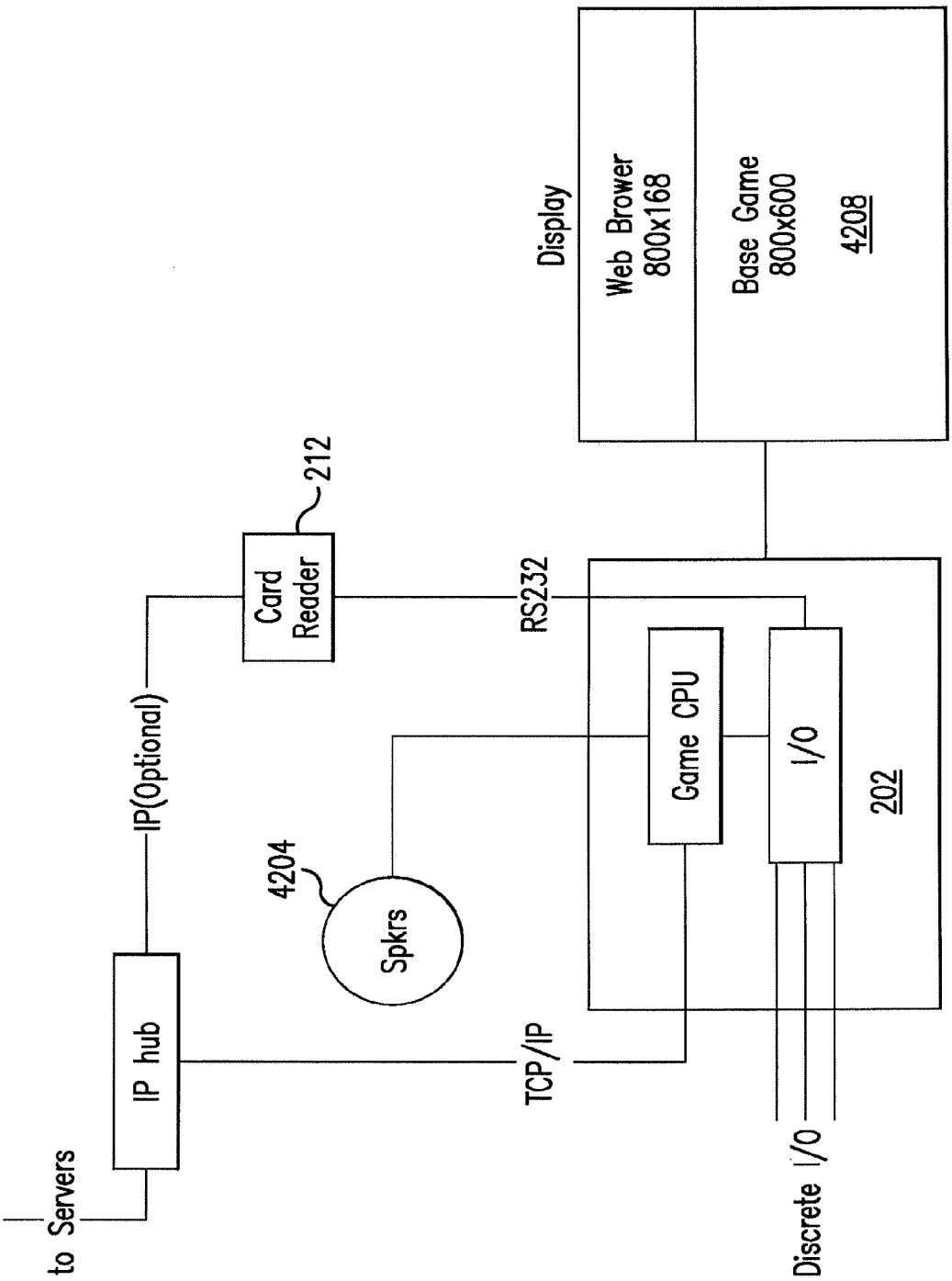

Display
Web Brower
800x168
Base Game
800x600
4208
212
Card
Reader
RS232
IP(Optional)
Game CPU
I/O
202
4204
Spkrs
IP hub
TCP/IP
to Servers
Discrete I/O

FIG. 7

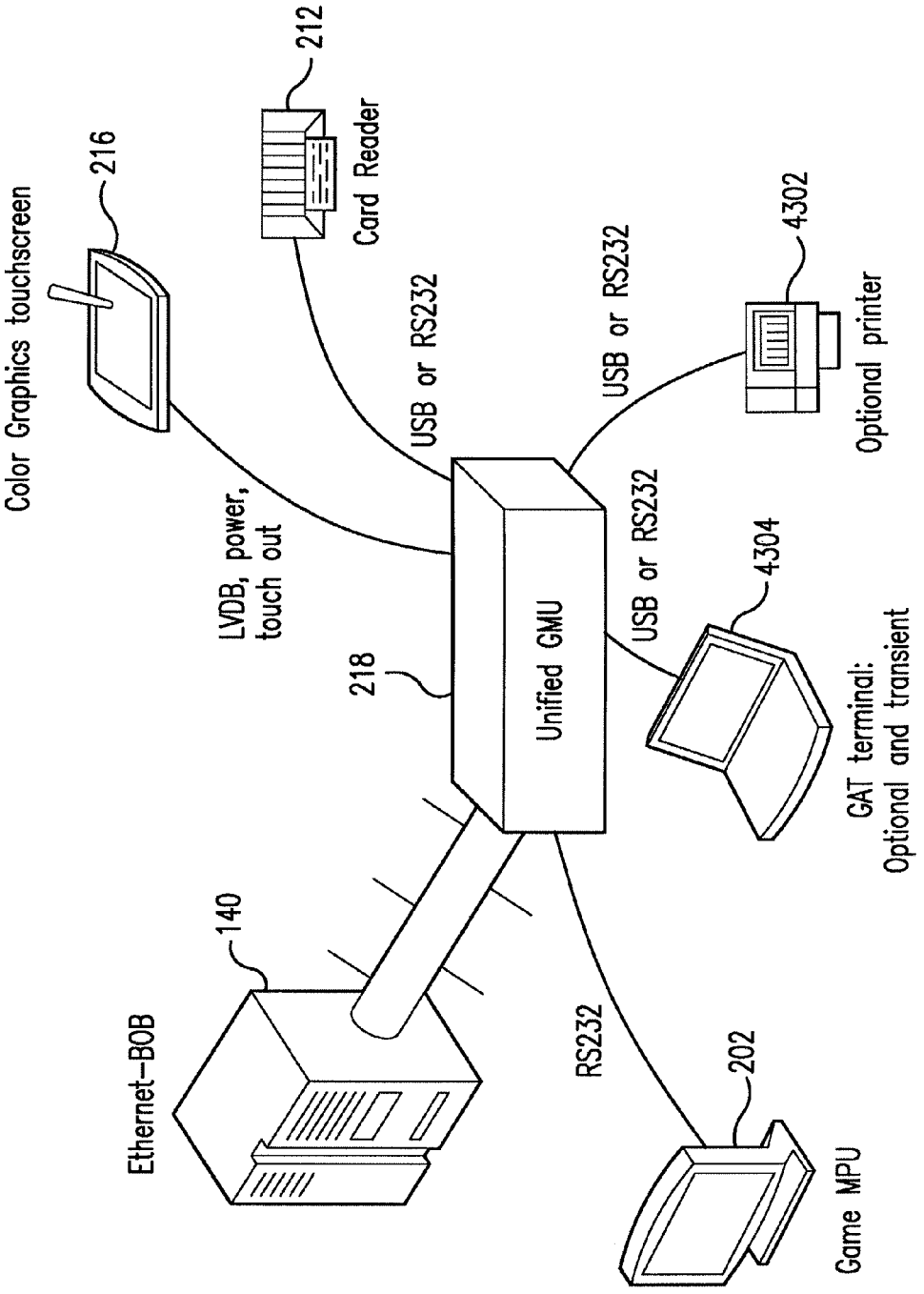

Color Graphics touchscreen
216
212
Card Reader
LVDB, power, touch out
USB or RS232
USB or RS232
4302
Optional printer
218
Unified GMU
USB or RS232
4304
GAT terminal: Optional and transient
140
Ethernet–BOB
RS232
202
Game MPU

FIG.8

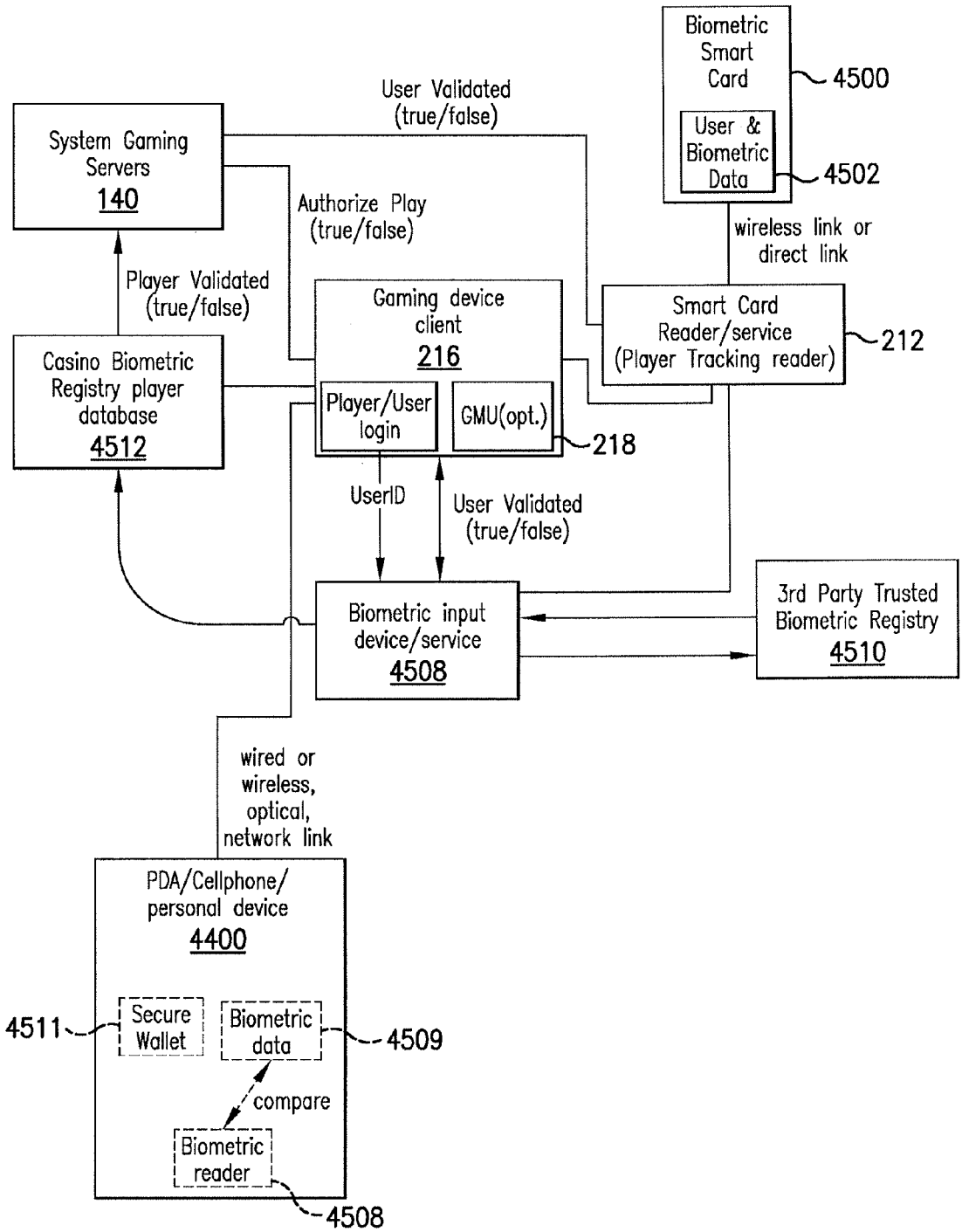

Biometric Smart Card
4500
User & Biometric Data
4502
User Validated (true/false)
System Gaming Servers
140
Authorize Play (true/false)
wireless link or direct link
Player Validated (true/false)
Gaming device client
216
Smart Card Reader/service (Player Tracking reader)
212
Casino Biometric Registry player database
4512
Player/User login
GMU(opt.)
218
UserID
User Validated (true/false)
3rd Party Trusted Biometric Registry
4510
Biometric input device/service
4508
wired or wireless, optical, network link
PDA/Cellphone/ personal device
4400
4511
Secure Wallet
Biometric data
4509
compare
Biometric reader
4508

FIG.9

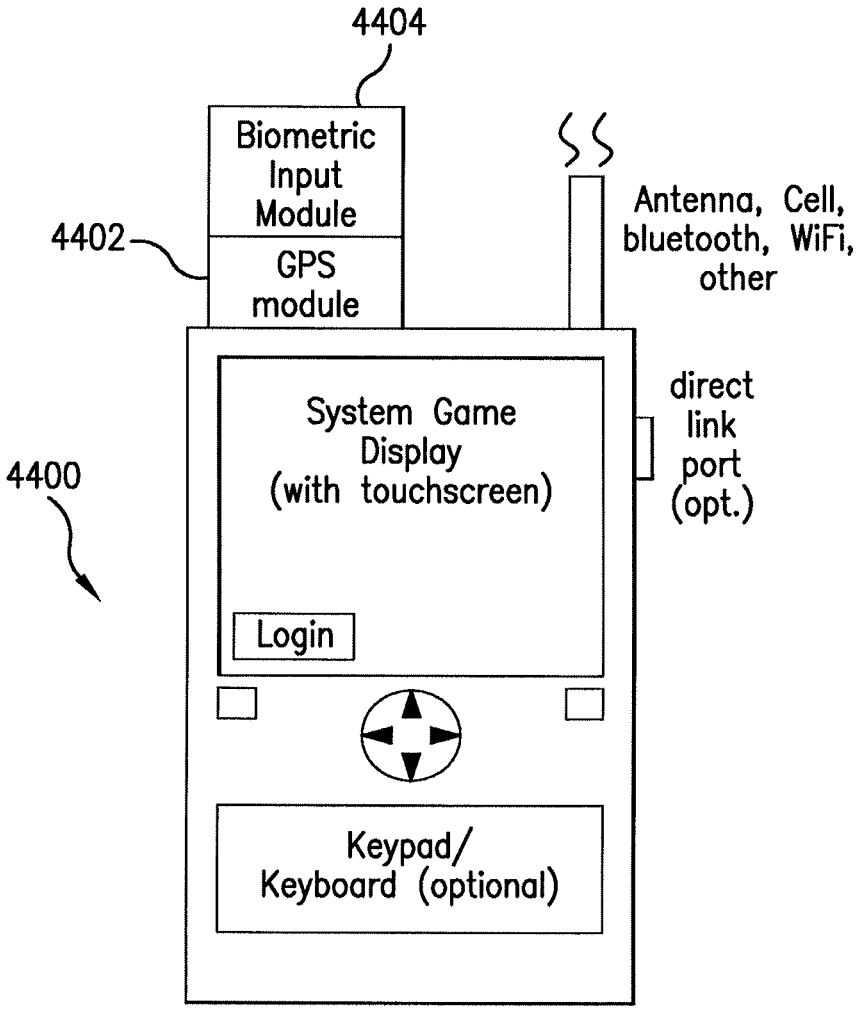

4404
Biometric Input Module
4402
GPS module
Antenna, Cell, bluetooth, WiFi, other
System Game Display (with touchscreen)
direct link port (opt.)
4400
Login
Keypad/ Keyboard (optional)

FIG. 10

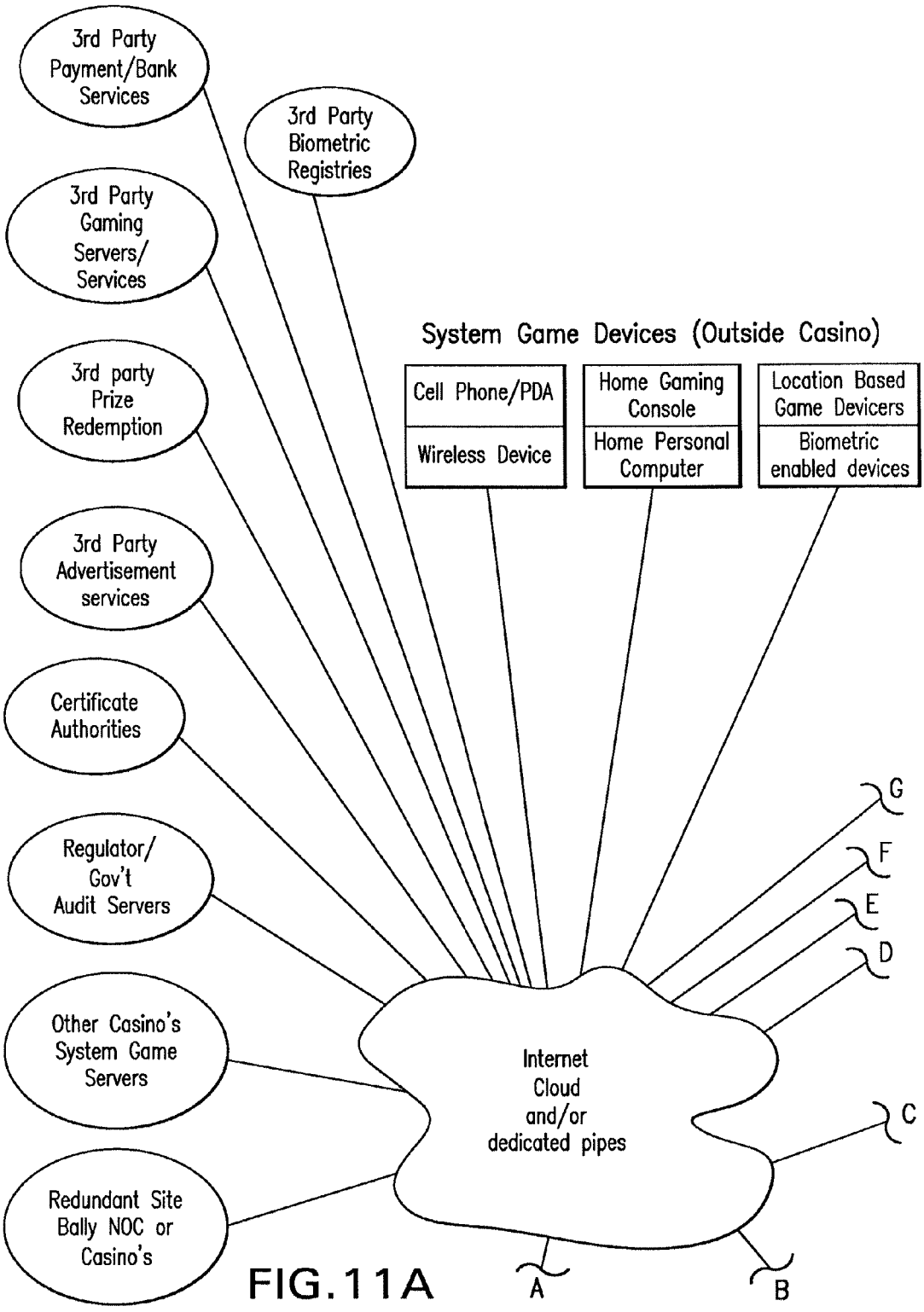

3rd Party Payment/Bank Services
3rd Party Biometric Registries
3rd Party Gaming Servers/ Services
System Game Devices (Outside Casino)
3rd party Prize Redemption
Cell Phone/PDA
Wireless Device
Home Gaming Console
Home Personal Computer
Location Based Game Devicers
Biometric enabled devices
3rd Party Advertisement services
Certificate Authorities
Regulator/ Gov't Audit Servers
Other Casino's System Game Servers
Redundant Site Bally NOC or Casino's
Internet Cloud and/or dedicated pipes
G
F
E
D
C
A
B

FIG. 11A

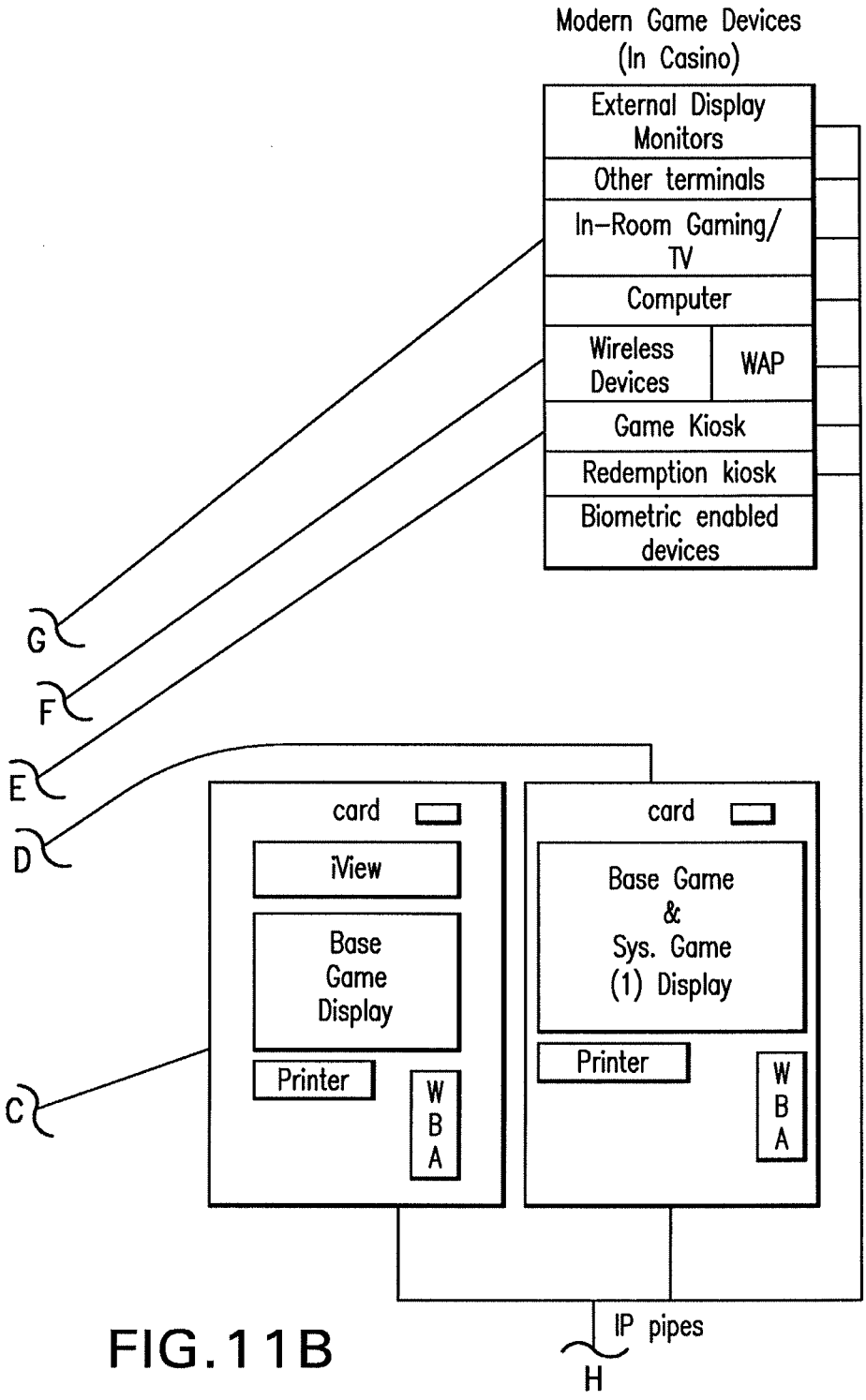

Modern Game Devices
(In Casino)
External Display Monitors
Other terminals
In-Room Gaming/ TV
Computer
Wireless Devices
WAP
Game Kiosk
Redemption kiosk
Biometric enabled devices
G
F
E
D
C
card
iView
Base Game Display
Printer
W B A
card
Base Game & Sys. Game (1) Display
Printer
W B A
IP pipes
H

FIG.11B

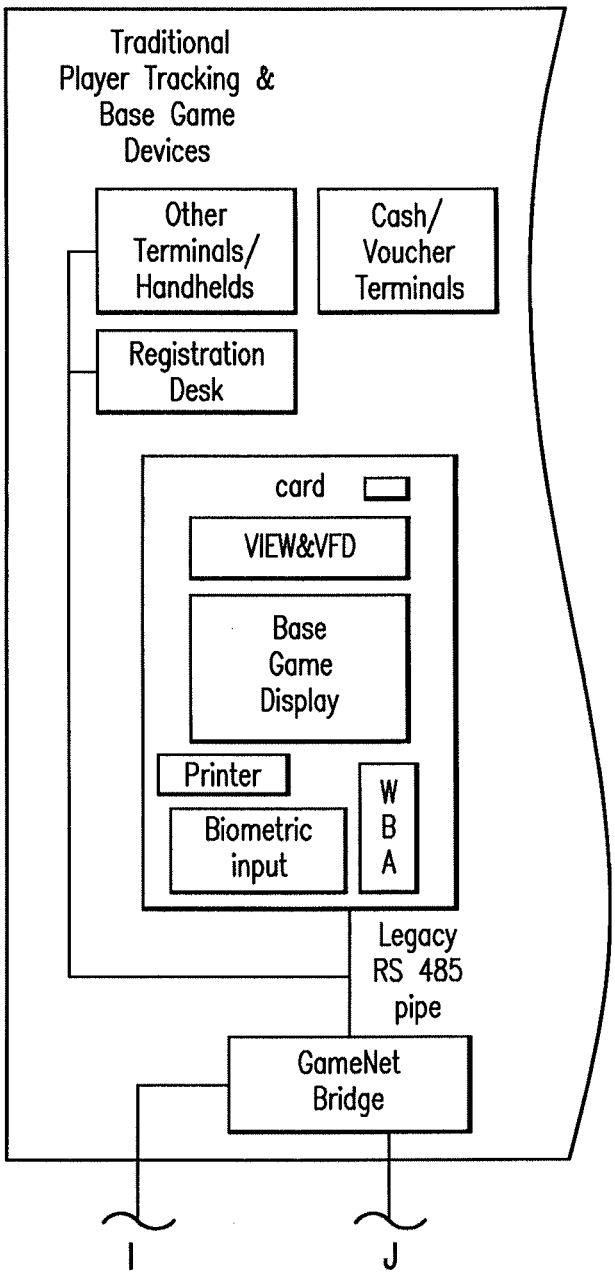

Traditional
Player Tracking &
Base Game
Devices
Other
Terminals/
Handhelds
Cash/
Voucher
Terminals
Registration
Desk
card
VIEW&VFD
Base
Game
Display
Printer
Biometric
input
W
B
A
Legacy
RS 485
pipe
GameNet
Bridge
I
J

FIG.11C

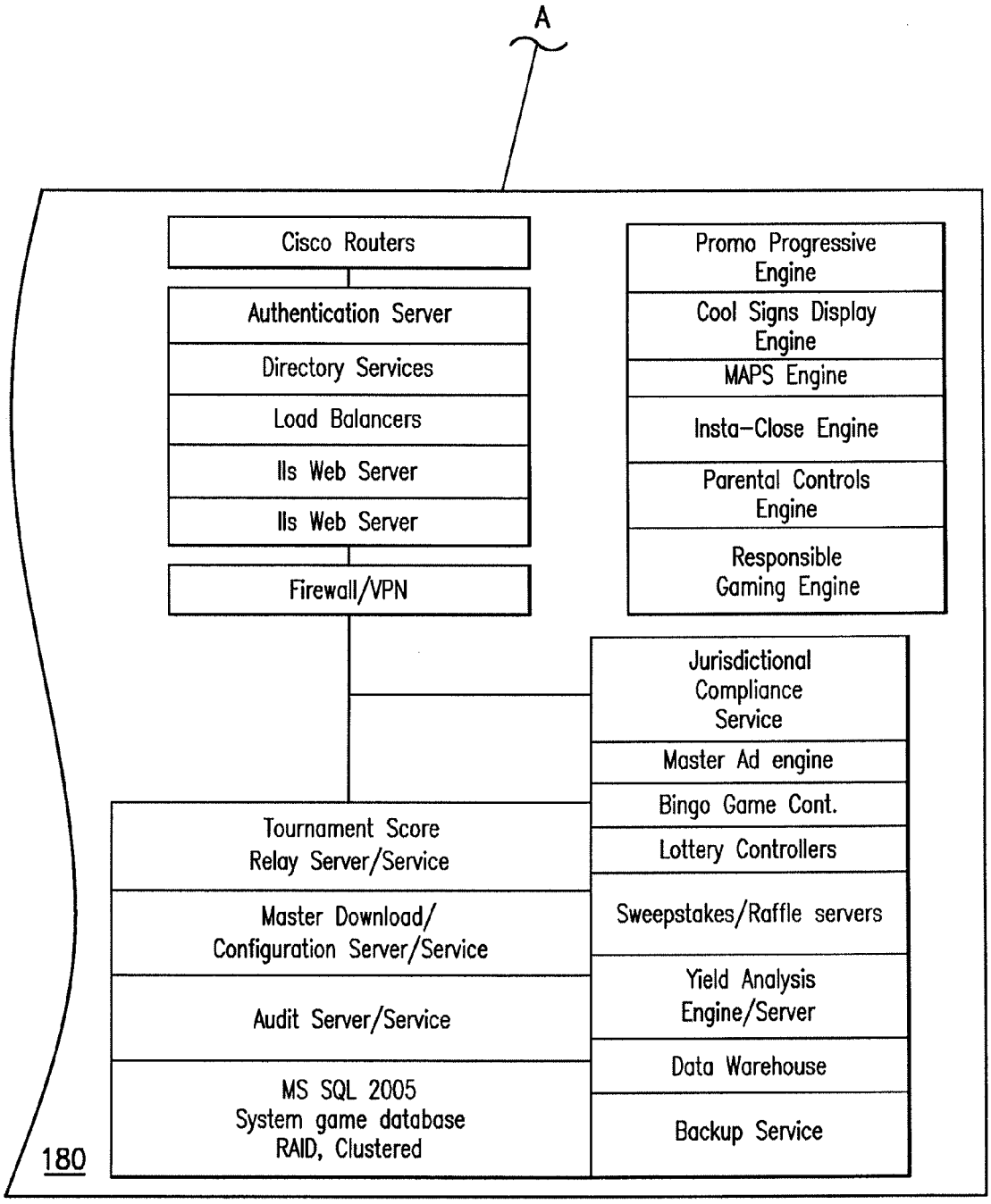

A
Cisco Routers
Authentication Server
Directory Services
Load Balancers
Ils Web Server
Ils Web Server
Firewall/VPN
Promo Progressive Engine
Cool Signs Display Engine
MAPS Engine
Insta-Close Engine
Parental Controls Engine
Responsible Gaming Engine
Jurisdictional Compliance Service
Master Ad engine
Bingo Game Cont.
Lottery Controllers
Sweepstakes/Raffle servers
Yield Analysis Engine/Server
Data Warehouse
Backup Service
Tournament Score Relay Server/Service
Master Download/ Configuration Server/Service
Audit Server/Service
MS SQL 2005 System game database RAID, Clustered
180

FIG.11D

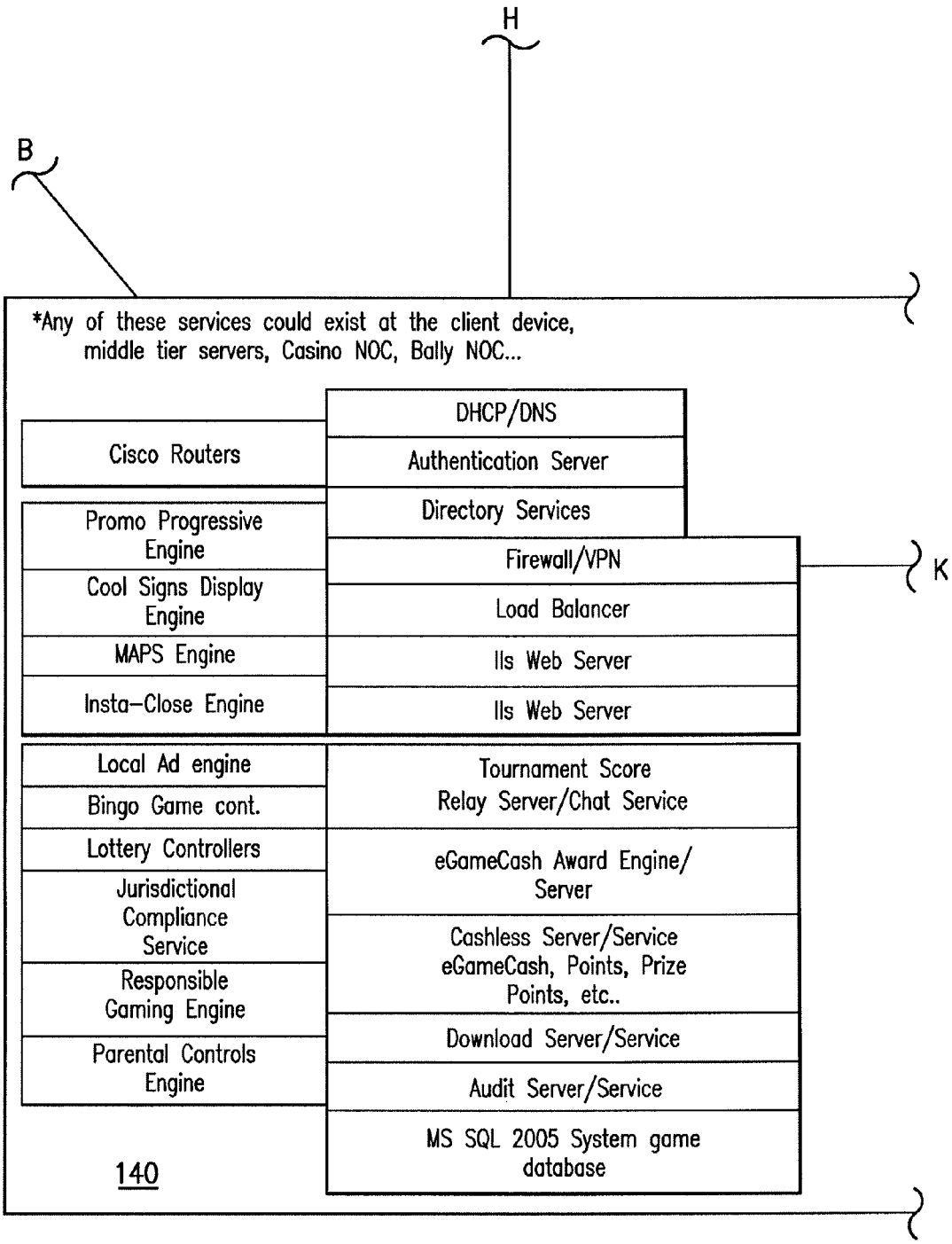

H
B
*Any of these services could exist at the client device, middle tier servers, Casino NOC, Bally NOC...
DHCP/DNS
Cisco Routers
Authentication Server
Directory Services
Promo Progressive Engine
Firewall/VPN
K
Cool Signs Display Engine
Load Balancer
MAPS Engine
Iis Web Server
Insta-Close Engine
Iis Web Server
Local Ad engine
Tournament Score Relay Server/Chat Service
Bingo Game cont.
Lottery Controllers
eGameCash Award Engine/ Server
Jurisdictional Compliance Service
Cashless Server/Service eGameCash, Points, Prize Points, etc..
Responsible Gaming Engine
Download Server/Service
Parental Controls Engine
Audit Server/Service
MS SQL 2005 System game database
140

FIG.11E

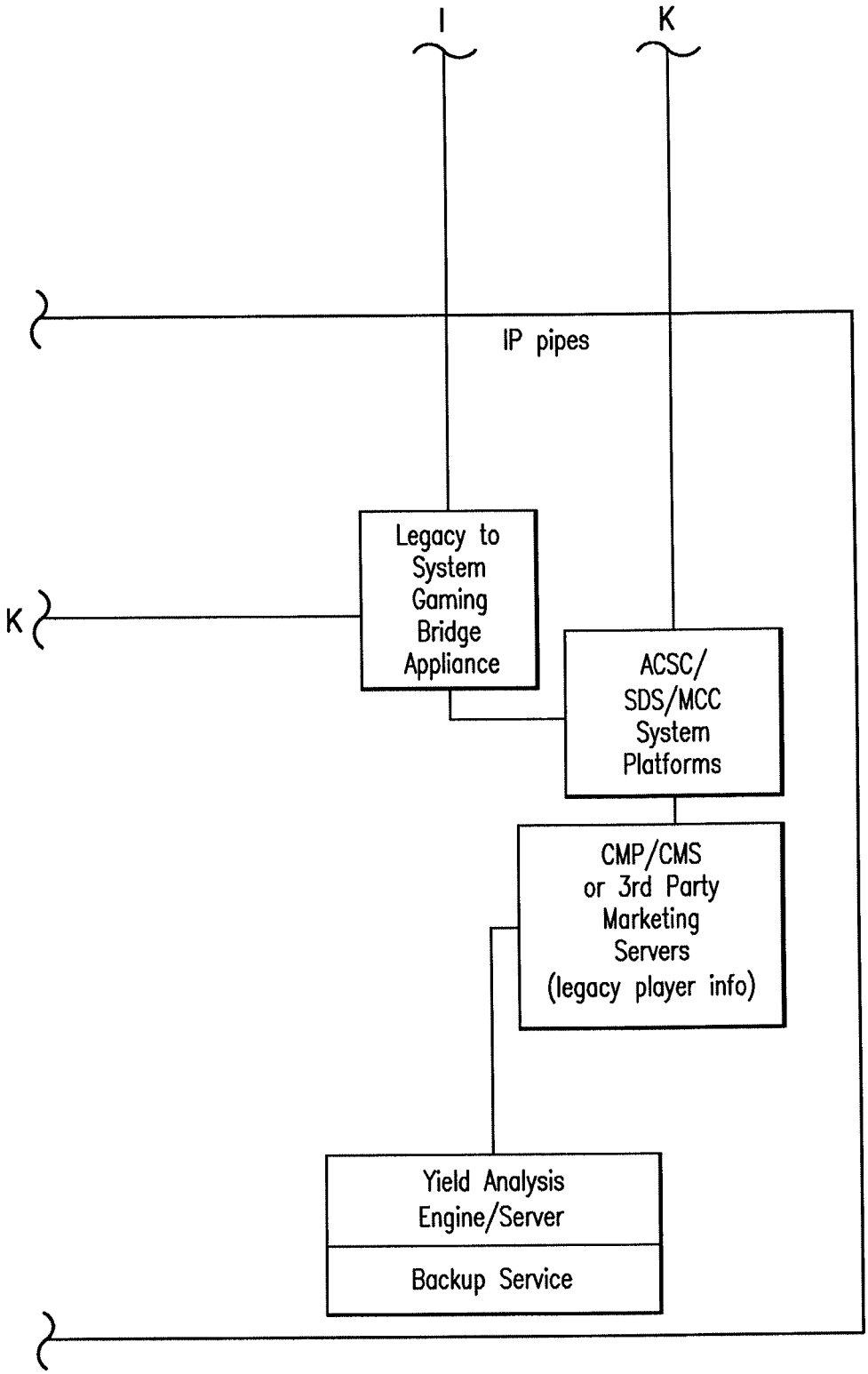

I
K
IP pipes
K
Legacy to System Gaming Bridge Appliance
ACSC/ SDS/MCC System Platforms
CMP/CMS or 3rd Party Marketing Servers (legacy player info)
Yield Analysis Engine/Server
Backup Service

FIG. 11F

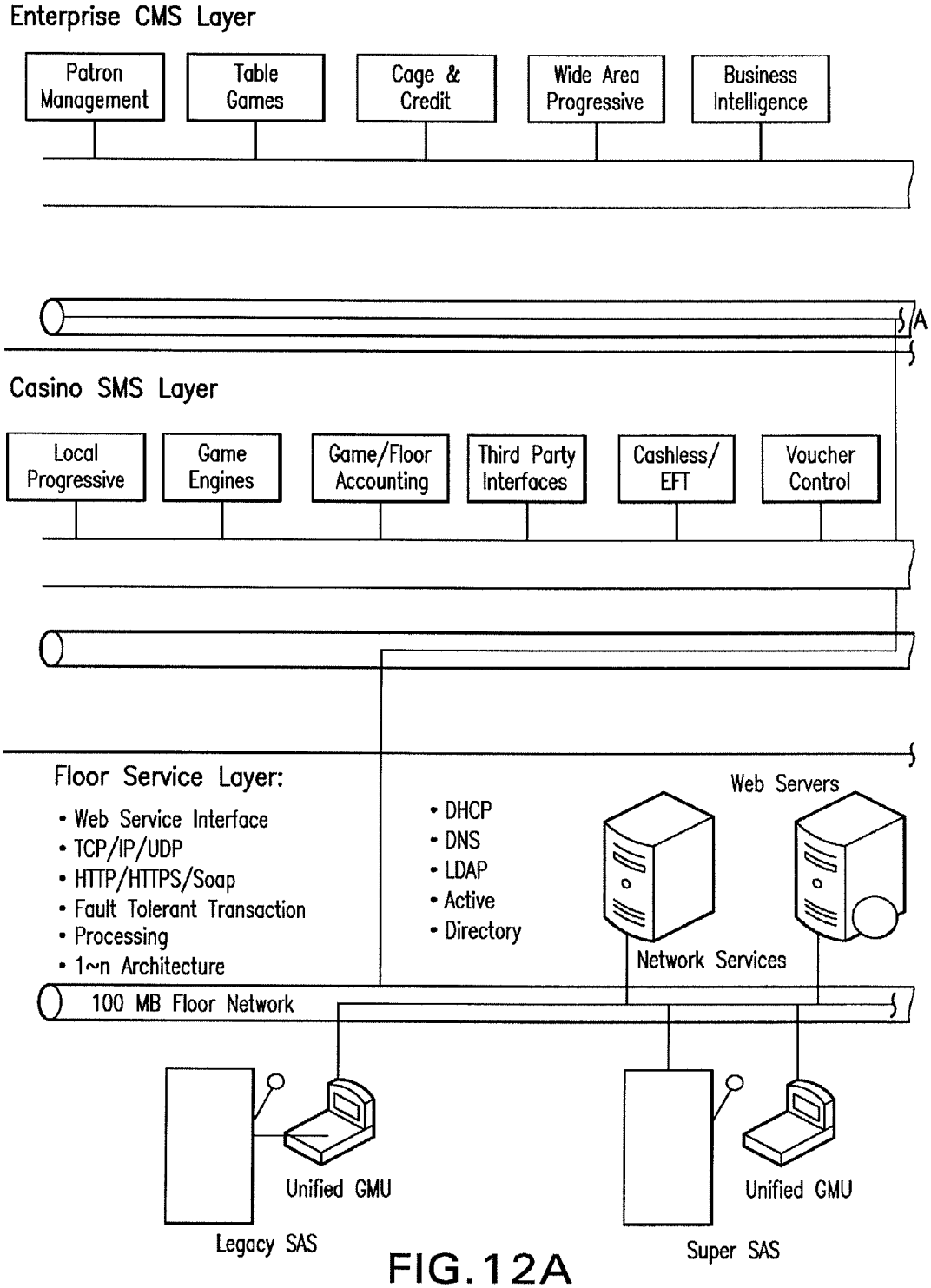

Enterprise CMS Layer
Patron Management
Table Games
Cage & Credit
Wide Area Progressive
Business Intelligence
A
Casino SMS Layer
Local Progressive
Game Engines
Game/Floor Accounting
Third Party Interfaces
Cashless/ EFT
Voucher Control
Floor Service Layer:
• Web Service Interface
• TCP/IP/UDP
• HTTP/HTTPS/Soap
• Fault Tolerant Transaction
• Processing
• 1~n Architecture
• DHCP
• DNS
• LDAP
• Active
• Directory
Web Servers
Network Services
100 MB Floor Network
Unified GMU
Legacy SAS
Unified GMU
Super SAS

FIG. 12A

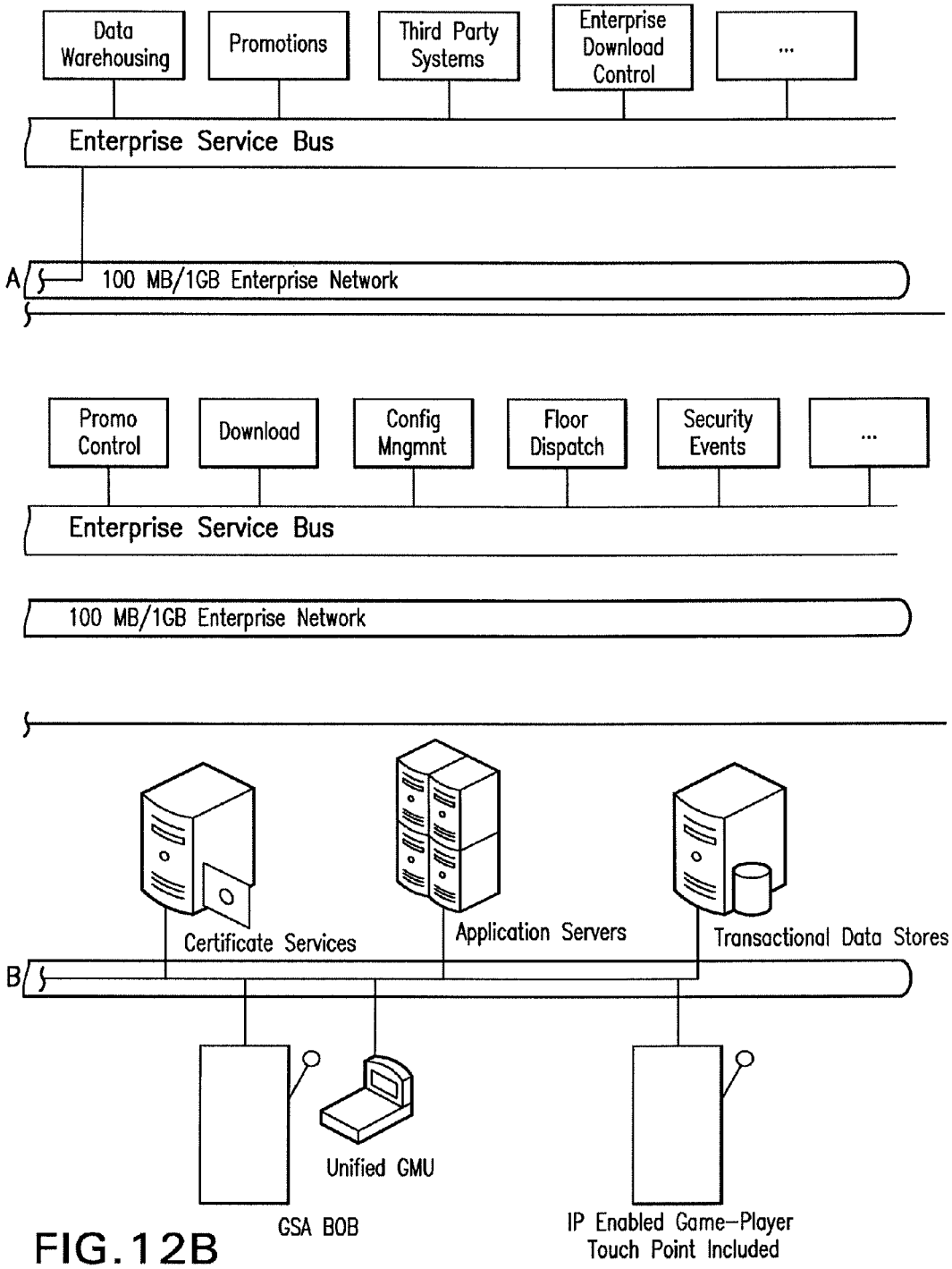

Data Warehousing
Promotions
Third Party Systems
Enterprise Download Control
...
Enterprise Service Bus
A
100 MB/1GB Enterprise Network
Promo Control
Download
Config Mngmnt
Floor Dispatch
Security Events
...
Enterprise Service Bus
100 MB/1GB Enterprise Network
Certificate Services
Application Servers
Transactional Data Stores
B
Unified GMU
GSA BOB
IP Enabled Game-Player Touch Point Included

FIG. 12B

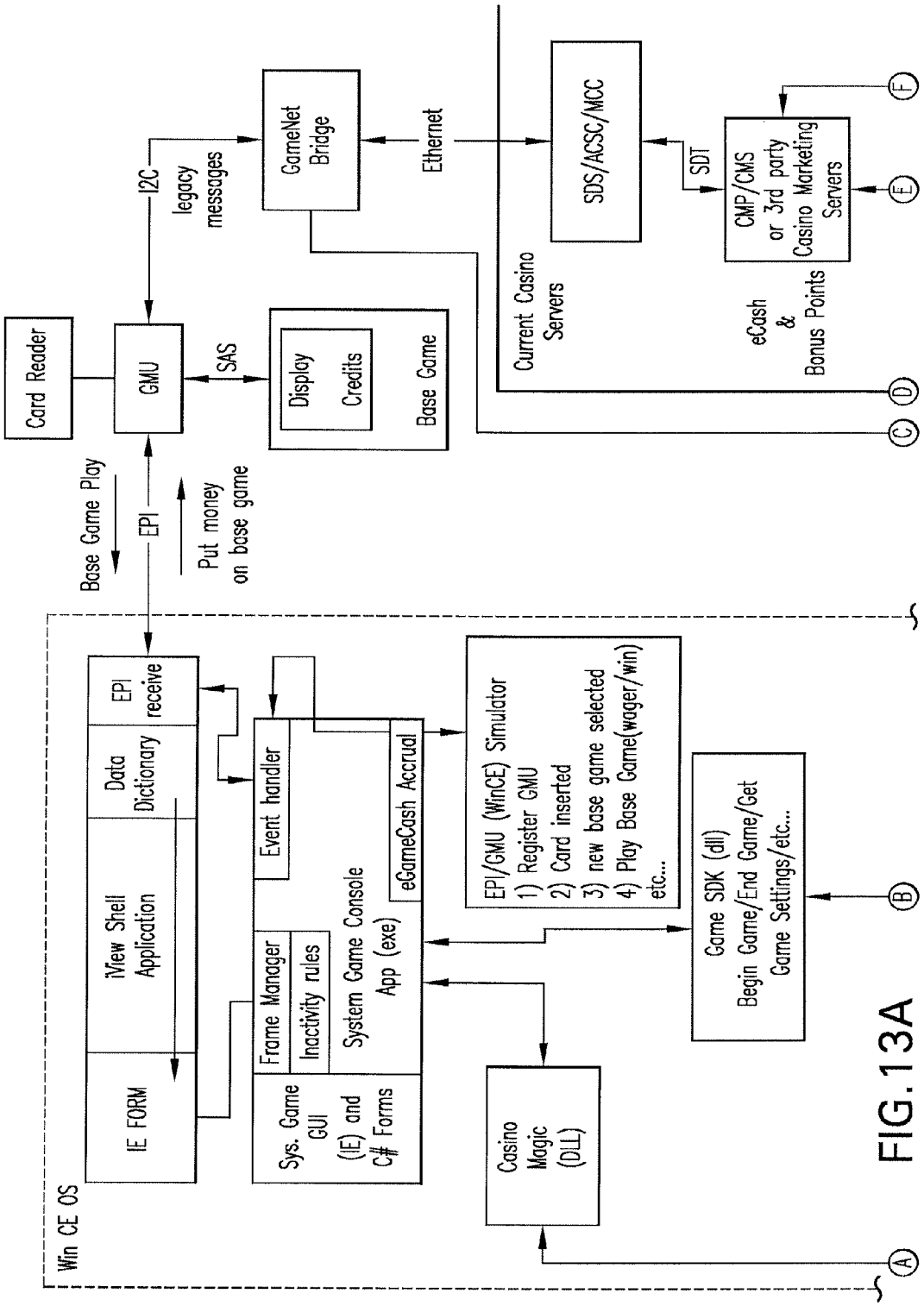

Win CE OS
IE FORM
iView Shell Application
Data Dictionary
EPI receive
Sys. Game GUI (IE) and C# Forms
Frame Manager
Inactivity rules
System Game Console App (exe)
Event handler
eGameCash Accrual
Casino Magic (DLL)
EPI/GMU (WinCE) Simulator
1) Register GMU
2) Card inserted
3) new base game selected
4) Play Base Game(wager/win)
etc...
Game SDK (dll)
Begin Game/End Game/Get Game Settings/etc...
Base Game Play
EPI
Put money on base game
Card Reader
GMU
SAS
Display Credits
Base Game
I2C
legacy messages
GameNet Bridge
Ethernet
Current Casino Servers
SDS/ACSC/MCC
SDT
CMP/CMS or 3rd party Casino Marketing Servers
eCash & Bonus Points
A
B
C
D
E
F

FIG. 13A

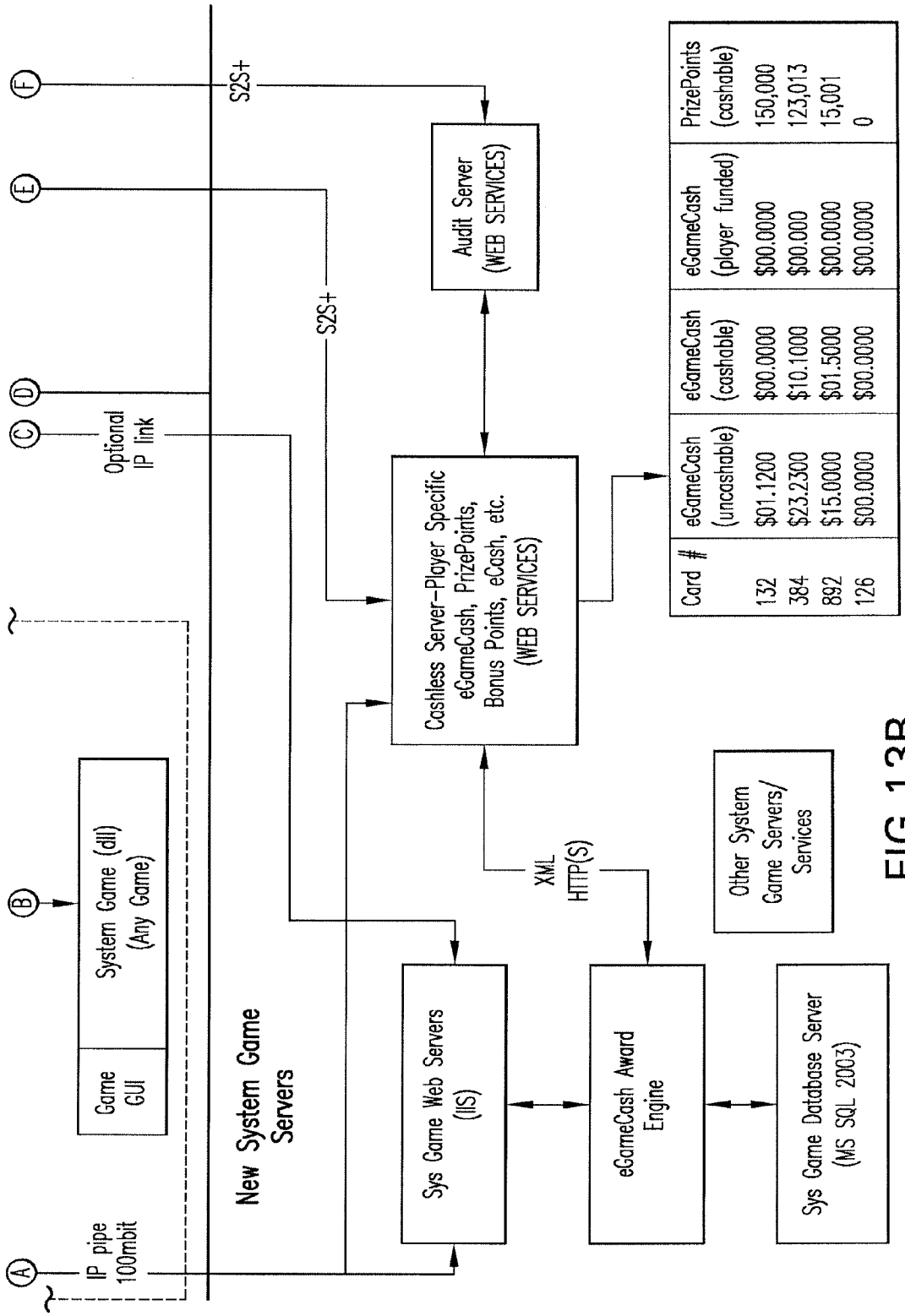

A
IP pipe
100mbit
B
System Game (dll)
(Any Game)
Game
GUI
New System Game
Servers
C
Optional
IP link
D
E
F
S2S+
S2S+
Audit Server
(WEB SERVICES)
Cashless Server–Player Specific
eGameCash, PrizePoints,
Bonus Points, eCash, etc.
(WEB SERVICES)
XML
HTTP(S)
Sys Game Web Servers
(IIS)
eGameCash Award
Engine
Sys Game Database Server
(MS SQL 2003)
Other System
Game Servers/
Services
Card #
eGameCash
(uncashable)
eGameCash
(cashable)
eGameCash
(player funded)
PrizePoints
(cashable)
132
$01.1200
$00.0000
$00.0000
150,000
384
$23.2300
$10.1000
$00.000
123,013
892
$15.0000
$01.5000
$00.0000
15,001
126
$00.0000
$00.0000
$00.0000
0

FIG. 13B

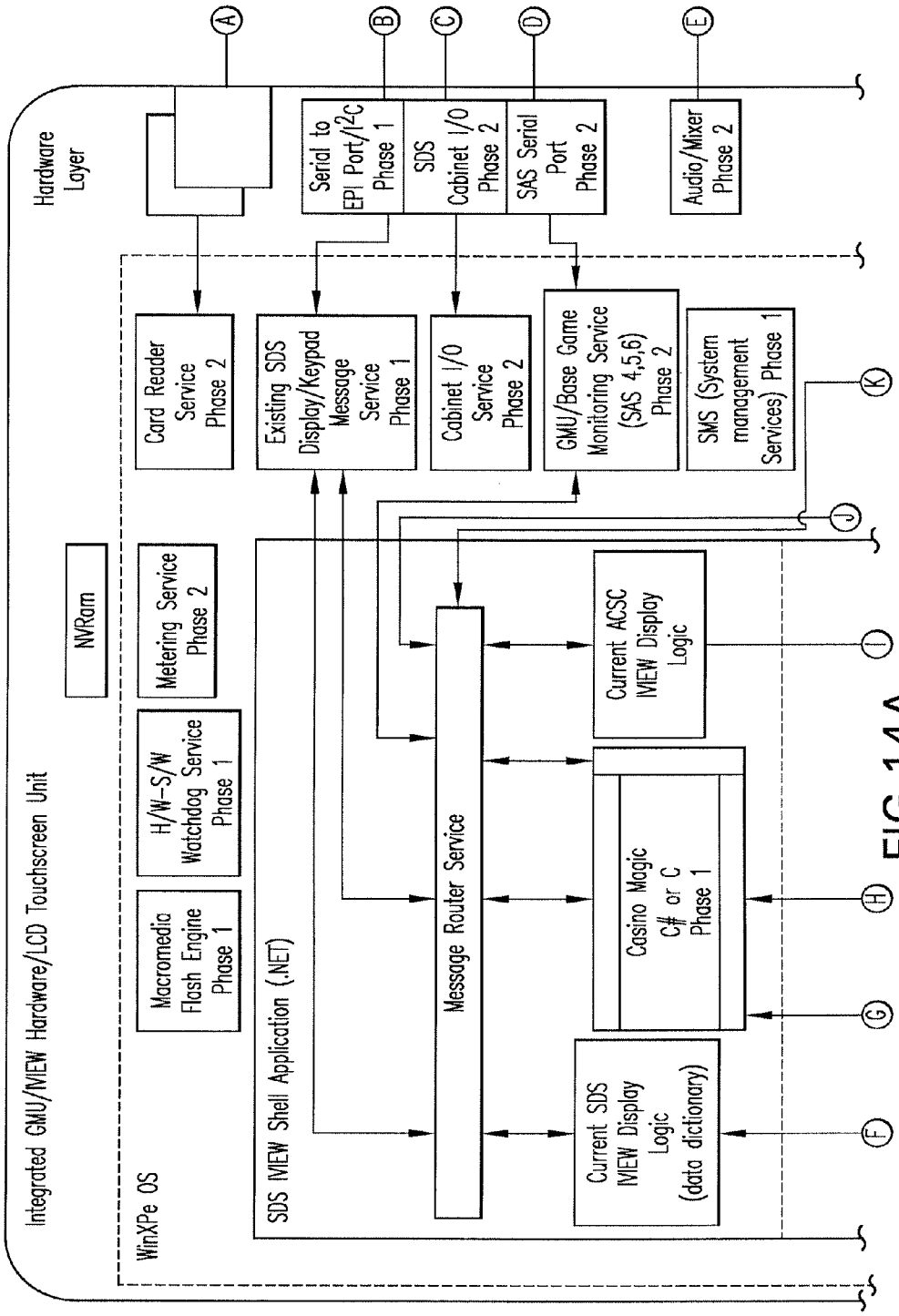

Integrated GMU/MEW Hardware/LCD Touchscreen Unit
Hardware Layer
WinXPe OS
SDS MEW Shell Application (.NET)
NVRam
Macromedia Flash Engine Phase 1
H/W-S/W Watchdog Service Phase 1
Metering Service Phase 2
Card Reader Service Phase 2
Existing SDS Display/Keypad Message Service Phase 1
Cabinet I/O Service Phase 2
GMU/Base Game Monitoring Service (SAS 4,5,6) Phase 2
SMS (System management Services) Phase 1
Serial to EPI Port/I2C Phase 1
SDS Cabinet I/O Phase 2
SAS Serial Port Phase 2
Audio/Mixer Phase 2
Message Router Service
Current ACSC MEW Display Logic
Casino Magic C# or C Phase 1
Current SDS MEW Display Logic (data dictionary)
A
B
C
D
E
F
G
H
I
J
K

FIG.14A

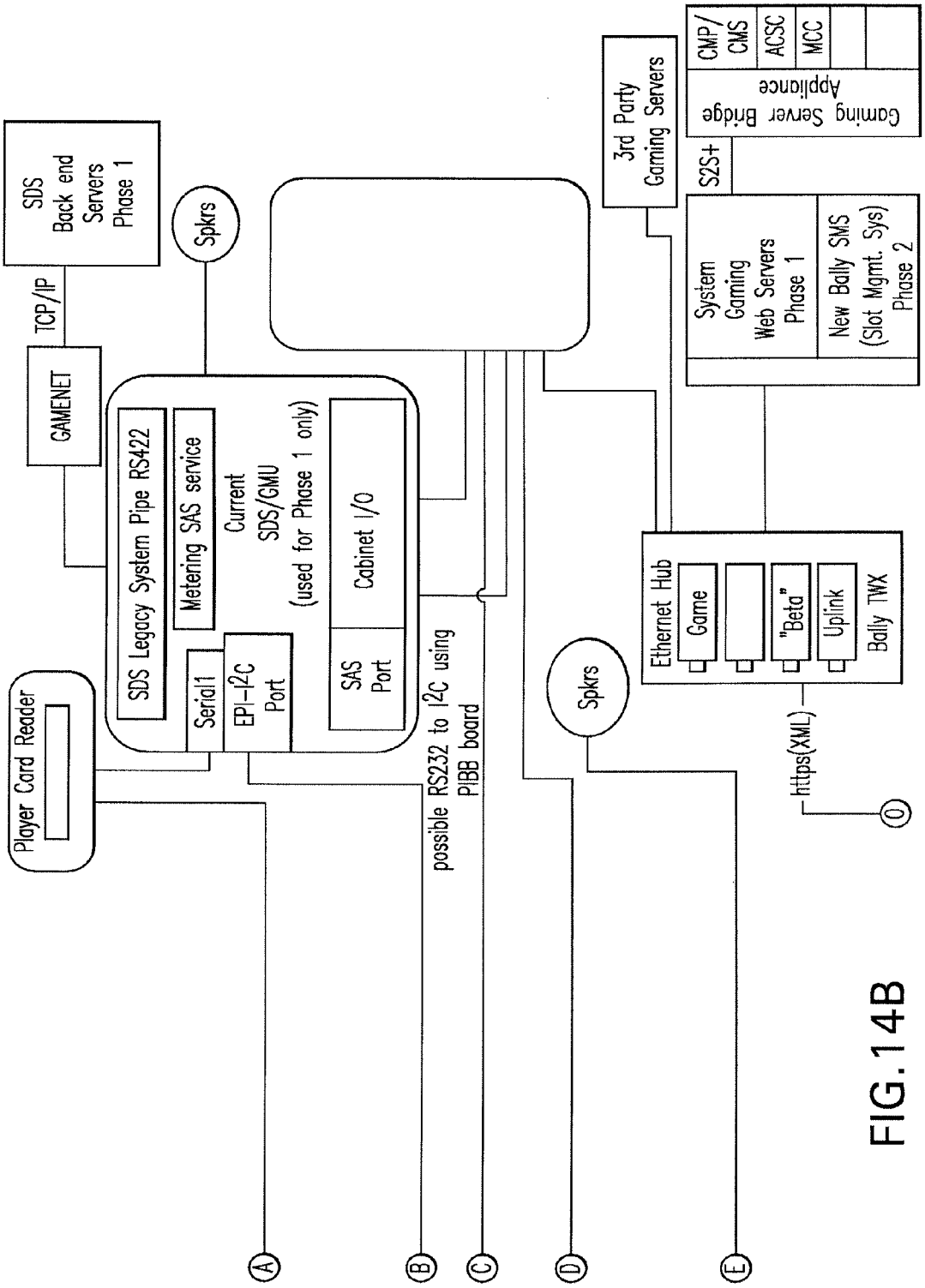

SDS Back end Servers Phase 1
TCP/IP
GAMENET
Spkrs
SDS Legacy System Pipe RS422
Metering SAS service
Current SDS/GMU (used for Phase 1 only)
Serial1
EPI-I2C Port
Cabinet I/O
SAS Port
Player Card Reader
possible RS232 to I2C using PIBB board
3rd Party Gaming Servers
S2S+
Gaming Server Bridge Appliance
CMP/CMS
ACSC
MCC
System Gaming Web Servers Phase 1
New Bally SMS (Slot Mgmt. Sys) Phase 2
Ethernet Hub
Game
"Beta"
Uplink
Bally TWX
Spkrs
https(XML)
A
B
C
D
E
0

FIG. 14B

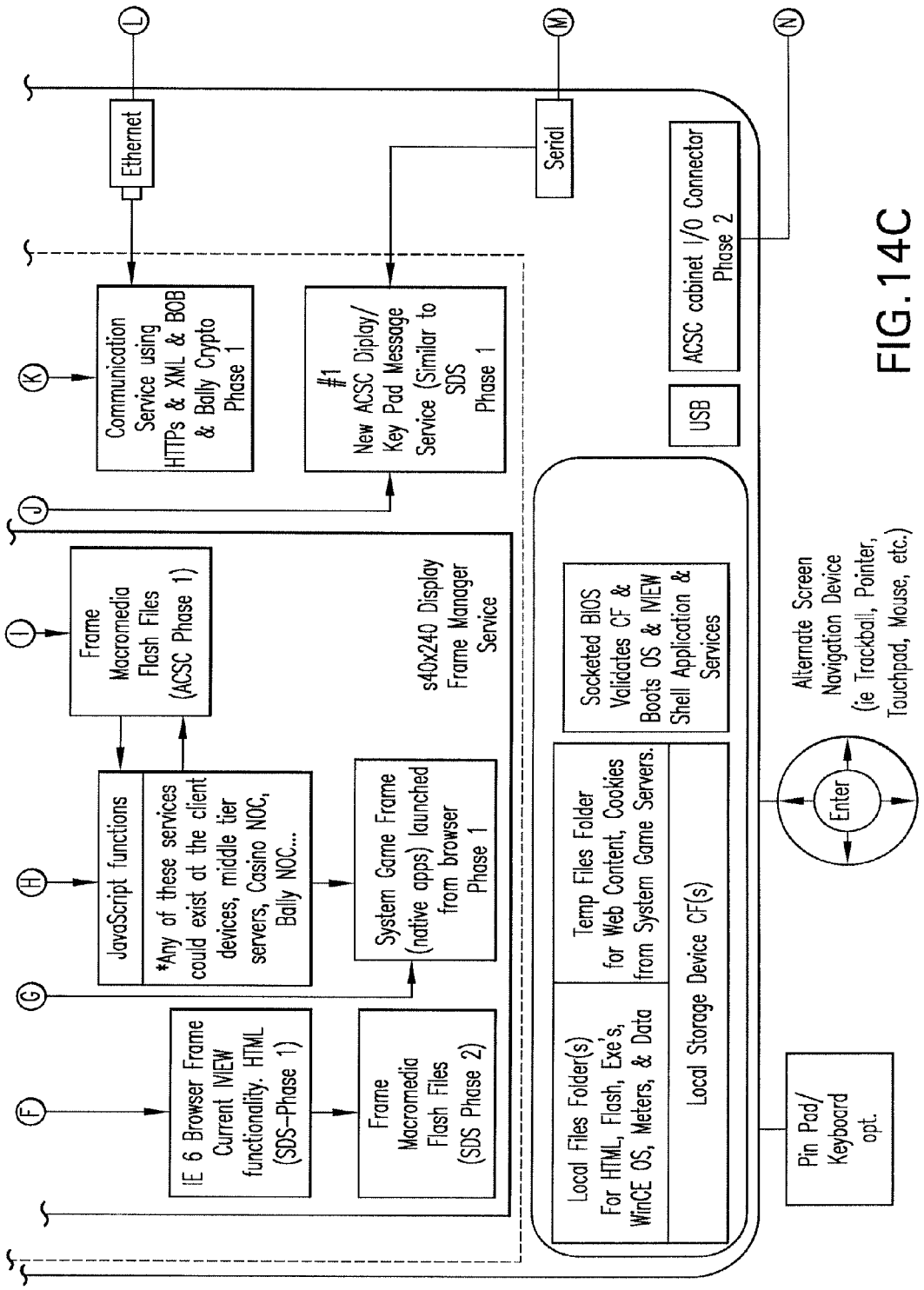

Ethernet
Serial
ACSC cabinet I/O Connector Phase 2
USB
Communication Service using HTTPs & XML & BOB & Bally Crypto Phase 1
#1 New ACSC Diplay/ Key Pad Message Service (Similar to SDS Phase 1
Frame Macromedia Flash Files (ACSC Phase 1)
s40x240 Display Frame Manager Service
Socketed BIOS Validates CF & Boots OS & IVIEW Shell Application & Services
JavaScript functions
*Any of these services could exist at the client devices, middle tier servers, Casino NOC, Bally NOC...
System Game Frame (native apps) launched from browser Phase 1
Temp Files Folder for Web Content, Cookies from System Game Servers.
Alternate Screen Navigation Device (ie Trackball, Pointer, Touchpad, Mouse, etc.)
Enter
IE 6 Browser Frame Current IVIEW functionality. HTML (SDS-Phase 1)
Frame Macromedia Flash Files (SDS Phase 2)
Local Files Folder(s) For HTML, Flash, Exe's, WinCE OS, Meters, & Data
Local Storage Device CF(s)
Pin Pad/ Keyboard opt.
L
M
N
K
J
I
H
G
F

FIG. 14C

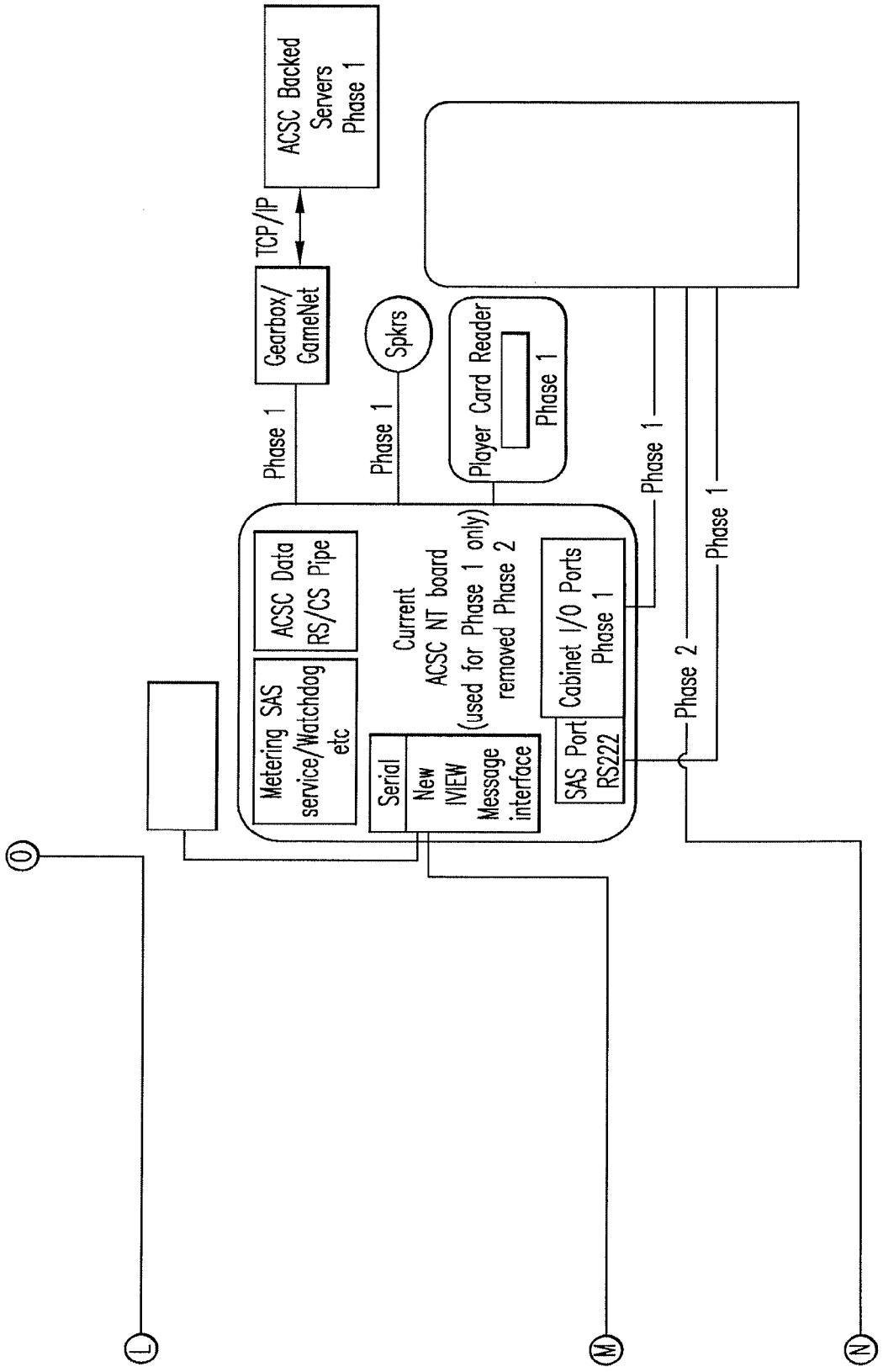

ACSC Backed Servers Phase 1
TCP/IP
Gearbox/ GameNet
Phase 1
Spkrs
Phase 1
Player Card Reader
Phase 1
Phase 1
Phase 1
Phase 2
ACSC Data RS/CS Pipe
Metering SAS service/Watchdog etc
Current ACSC NT board (used for Phase 1 only) removed Phase 2
Cabinet I/O Ports Phase 1
Serial
New IVIEW Message interface
SAS Port RS232
L
M
N

FIG. 14D

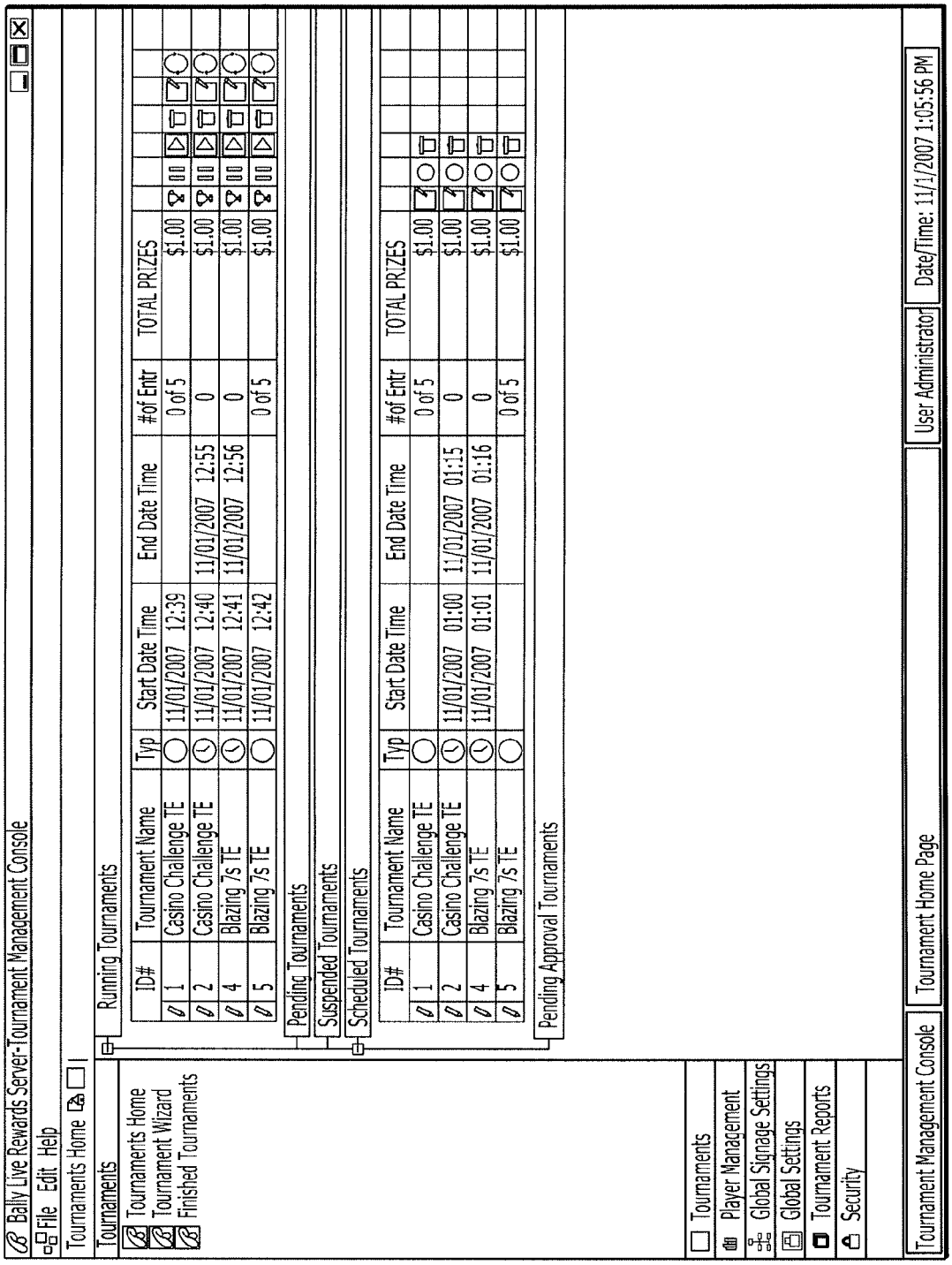

Bally Live Rewards Server-Tournament Management Console
File Edit Help
Tournaments Home
Tournaments
Tournaments Home
Tournament Wizard
Finished Tournaments
Running Tournaments
ID# Tournament Name Typ Start Date Time End Date Time #of Entr TOTAL PRIZES
1 Casino Challenge TE 11/01/2007 12:39 0 of 5 $1.00
2 Casino Challenge TE 11/01/2007 12:40 11/01/2007 12:55 0 $1.00
4 Blazing 7s TE 11/01/2007 12:41 11/01/2007 12:56 0 $1.00
5 Blazing 7s TE 11/01/2007 12:42 0 of 5 $1.00
Pending Tournaments
Suspended Tournaments
Scheduled Tournaments
ID# Tournament Name Typ Start Date Time End Date Time #of Entr TOTAL PRIZES
1 Casino Challenge TE 0 of 5 $1.00
2 Casino Challenge TE 11/01/2007 01:00 11/01/2007 01:15 0 $1.00
4 Blazing 7s TE 11/01/2007 01:01 11/01/2007 01:16 0 $1.00
5 Blazing 7s TE 0 of 5 $1.00
Pending Approval Tournaments
Tournaments
Player Management
Global Signage Settings
Global Settings
Tournament Reports
Security
Tournament Management Console
Tournament Home Page
User Administrator
Date/Time: 11/1/2007 1:05:56 PM

FIG. 15

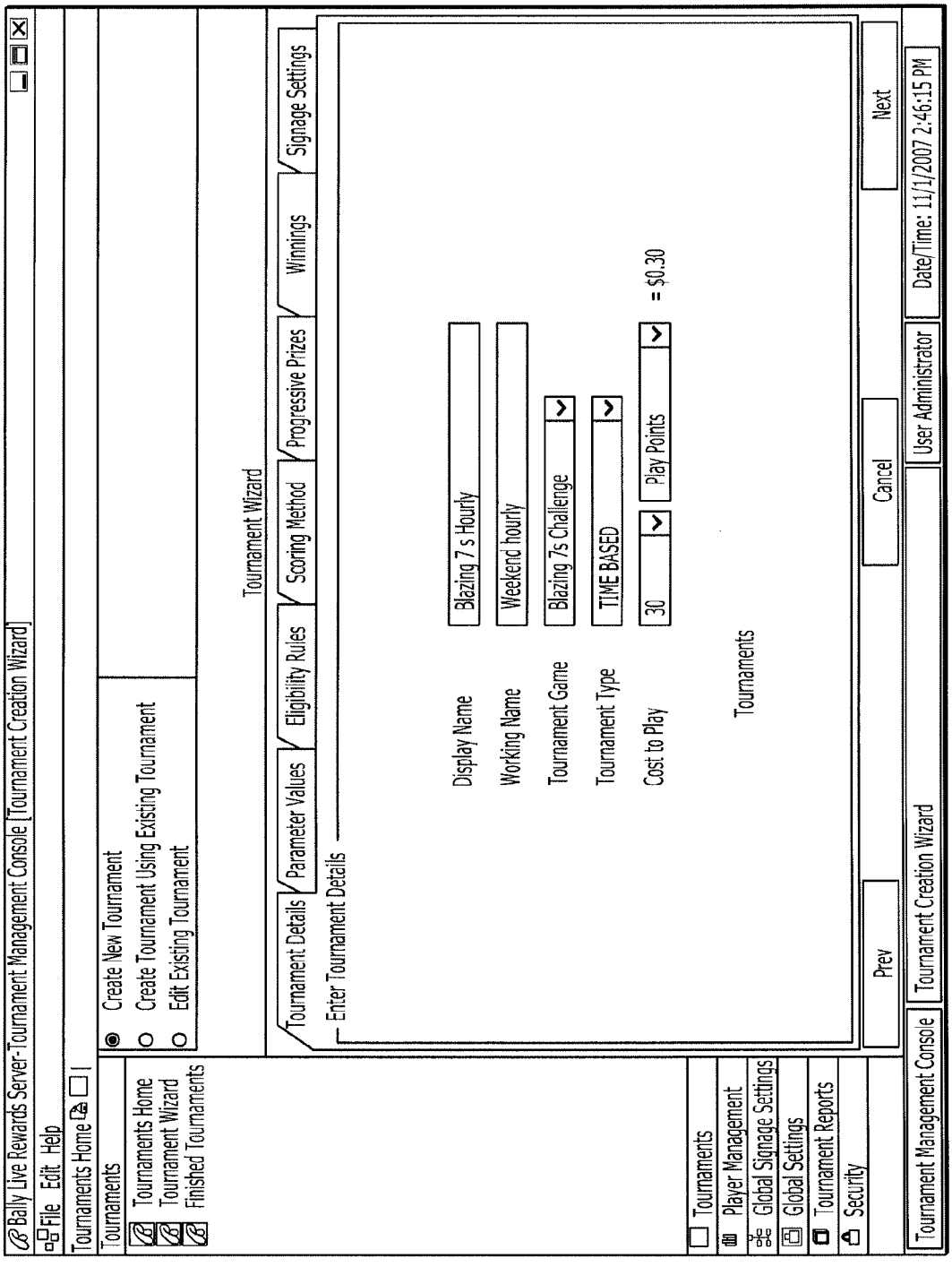

Bally Live Rewards Server-Tournament Management Console [Tournament Creation Wizard]
File Edit Help
Tournaments Home
Tournaments
Tournaments Home
Tournament Wizard
Finished Tournaments
Create New Tournament
Create Tournament Using Existing Tournament
Edit Existing Tournament
Tournament Wizard
Tournament Details
Parameter Values
Eligibility Rules
Scoring Method
Progressive Prizes
Winnings
Signage Settings
Enter Tournament Details
Display Name
Blazing 7 s Hourly
Working Name
Weekend hourly
Tournament Game
Blazing 7s Challenge
Tournament Type
TIME BASED
Cost to Play
30
Play Points
= $0.30
Tournaments
Prev
Cancel
Next
Tournaments
Player Management
Global Signage Settings
Global Settings
Tournament Reports
Security
Tournament Management Console
Tournament Creation Wizard
User Administrator
Date/Time: 11/1/2007 2:46:15 PM

FIG. 16

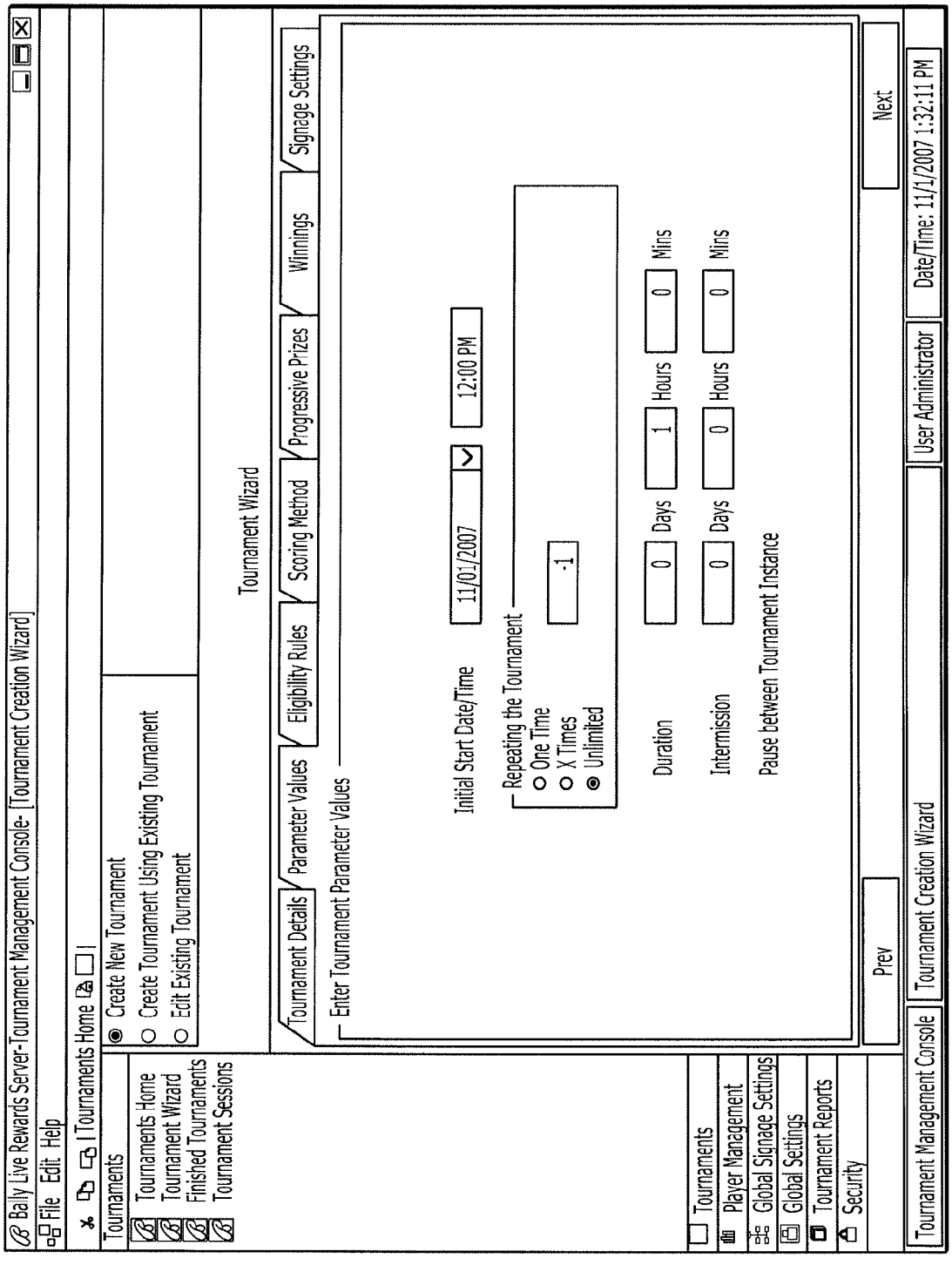

Bally Live Rewards Server-Tournament Management Console- [Tournament Creation Wizard]
File Edit Help
Tournaments Home
Tournaments
Tournaments Home
Tournament Wizard
Finished Tournaments
Tournament Sessions
Create New Tournament
Create Tournament Using Existing Tournament
Edit Existing Tournament
Tournament Wizard
Tournament Details
Parameter Values
Eligibility Rules
Scoring Method
Progressive Prizes
Winnings
Signage Settings
Enter Tournament Parameter Values
Initial Start Date/Time
11/01/2007
12:00 PM
Repeating the Tournament
One Time
X Times
Unlimited
-1
Duration
0
Days
1
Hours
0
Mins
Intermission
0
Days
0
Hours
0
Mins
Pause between Tournament Instance
Prev
Next
Tournaments
Player Management
Global Signage Settings
Global Settings
Tournament Reports
Security
Tournament Management Console
Tournament Creation Wizard
User Administrator
Date/Time: 11/1/2007 1:32:11 PM

FIG. 17

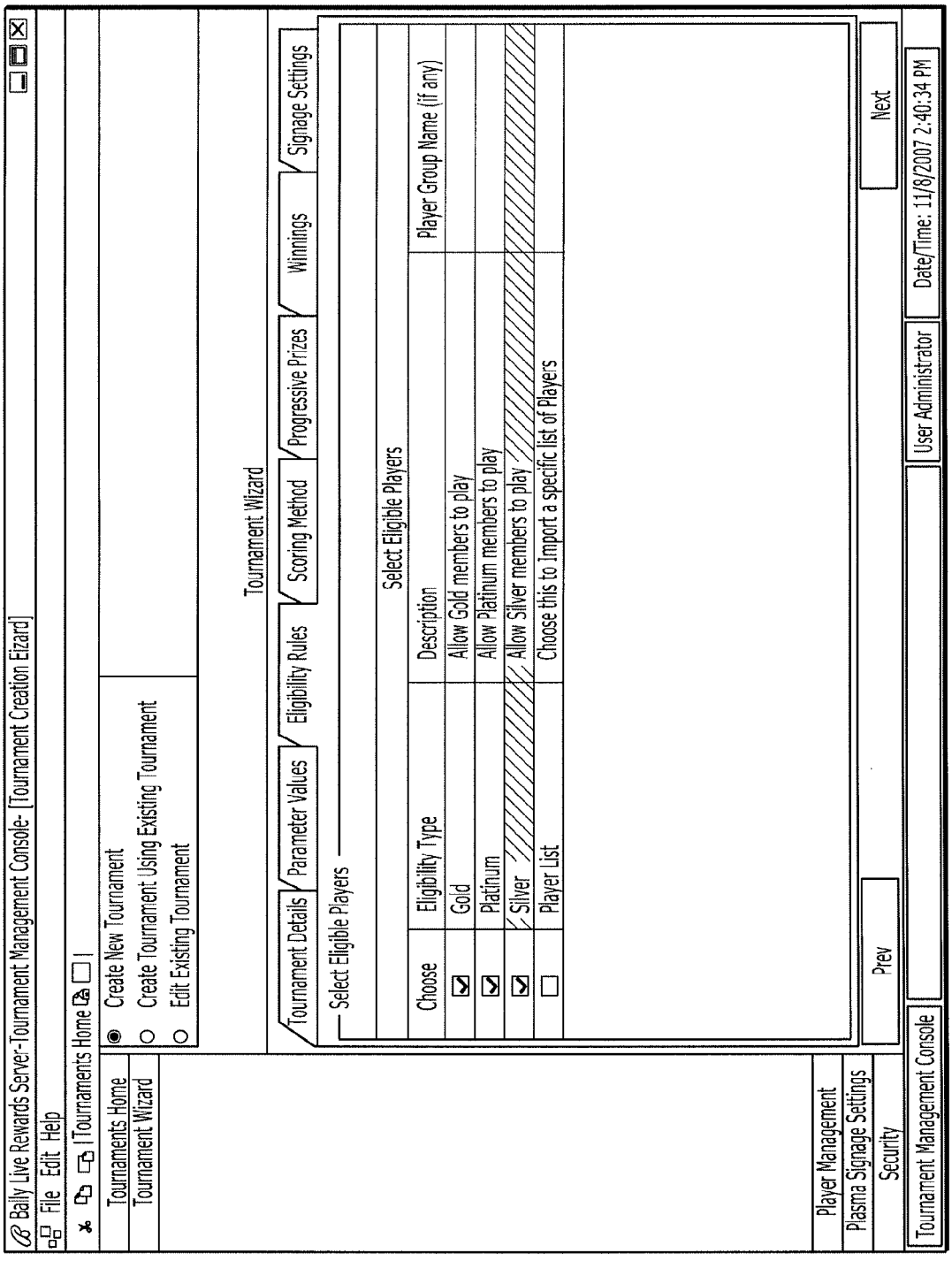

Bally Live Rewards Server-Tournament Management Console- [Tournament Creation Eizard]
File Edit Help
Tournaments Home
Tournaments Home
Tournament Wizard
Create New Tournament
Create Tournament Using Existing Tournament
Edit Existing Tournament
Tournament Wizard
Tournament Details
Parameter Values
Eligibility Rules
Scoring Method
Progressive Prizes
Winnings
Signage Settings
Select Eligible Players
Select Eligible Players
Choose
Eligibility Type
Description
Player Group Name (if any)
Gold
Allow Gold members to play
Platinum
Allow Platinum members to play
Silver
Allow Silver members to play
Player List
Choose this to Import a specific list of Players
Player Management
Plasma Signage Settings
Security
Prev
Next
Tournament Management Console
User Administrator
Date/Time: 11/8/2007 2:40:34 PM

FIG. 18


Import a Player Group or use Existing Group
Create New Player Group
Select an Existing Player Group
Select an Existing Player Group
Bally BUS Group
Players List
PLR Card #
First Name
Last Name
000000139
Pleasanton
Family
000000145
Rukku
Rupanagudi
000000146
Siva
Amaravathi
000000147
John
Link
000220100
Rukmangada
Rupanagudi
OK
Cancel

FIG.19

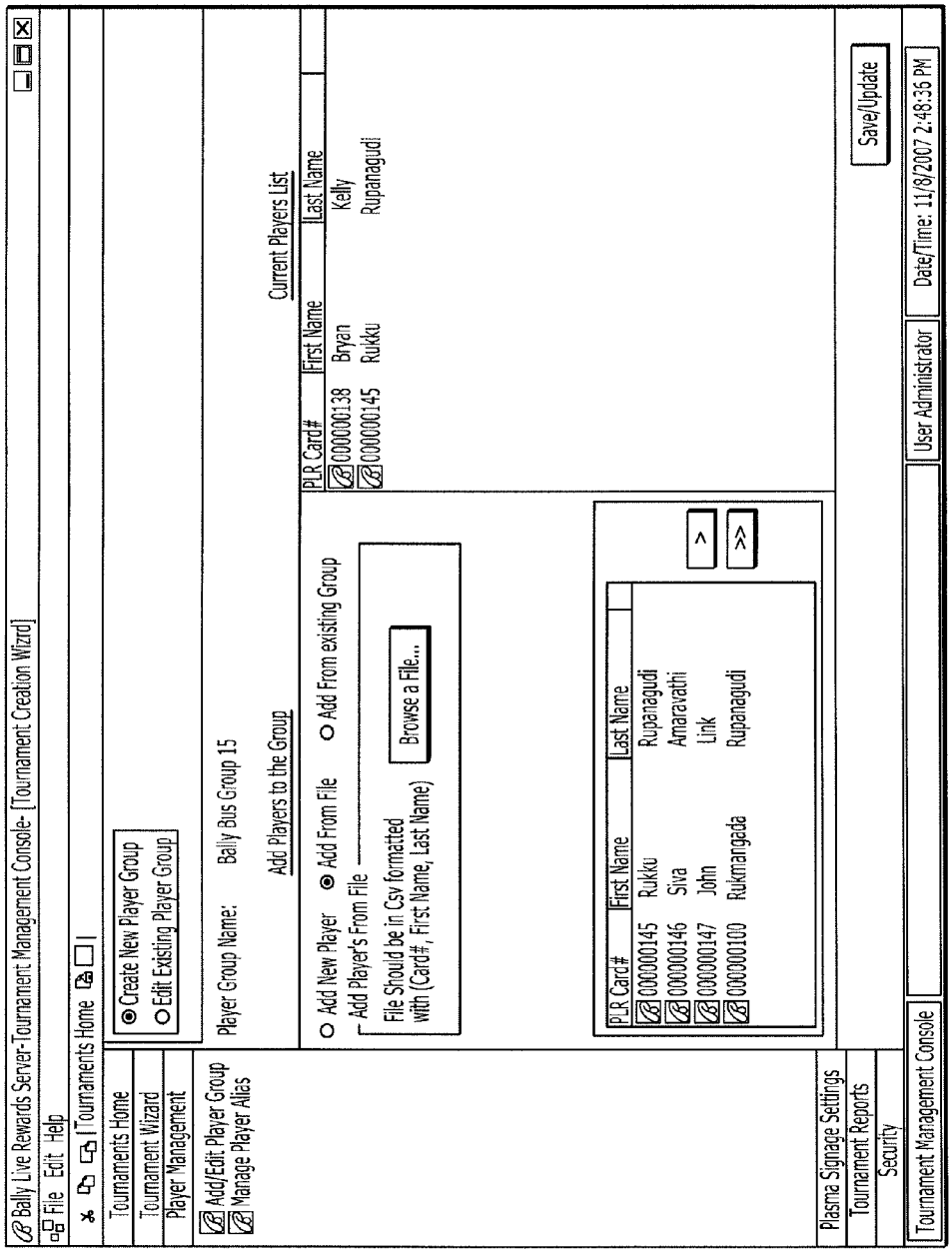

Bally Live Rewards Server-Tournament Management Console- [Tournament Creation Wizrd]
File Edit Help
Tournaments Home
Tournaments Home
Tournament Wizard
Player Management
Add/Edit Player Group
Manage Player Alias
Create New Player Group
Edit Existing Player Group
Player Group Name:
Bally Bus Group 15
Add Players to the Group
Add New Player
Add From File
Add From existing Group
Add Player's From File
File Should be in Csv formatted with (Card#, First Name, Last Name)
Browse a File...
PLR Card#
First Name
Last Name
00000145 Rukku Rupanagudi
00000146 Siva Amaravathi
00000147 John Link
00000100 Rukmangada Rupanagudi
>
>>
Current Players List
PLR Card#
First Name
Last Name
00000138 Bryan Kelly
00000145 Rukku Rupanagudi
Save/Update
Plasma Signage Settings
Tournament Reports
Security
Tournament Management Console
User Administrator
Date/Time: 11/8/2007 2:48:36 PM

FIG. 20

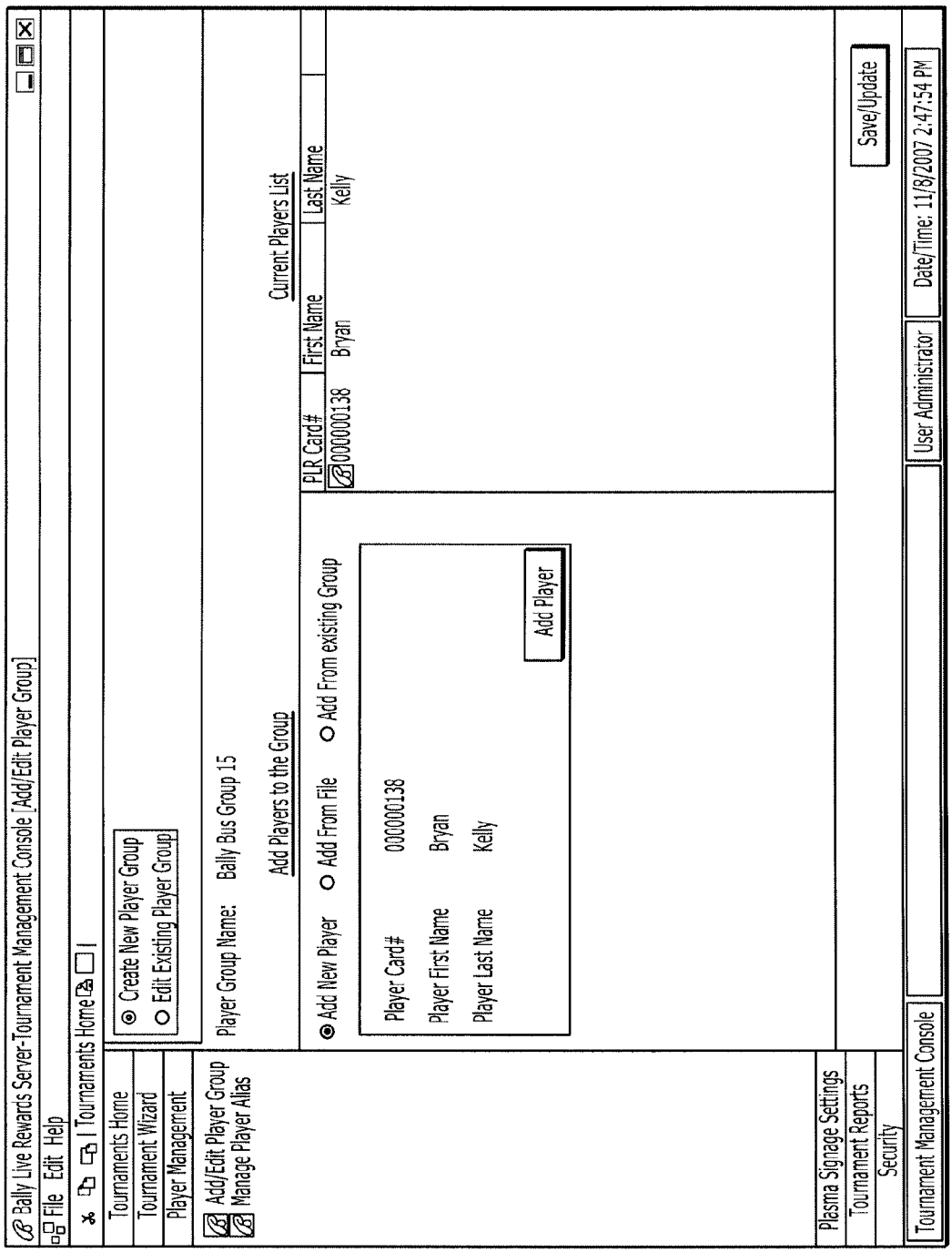

Bally Live Rewards Server-Tournament Management Console [Add/Edit Player Group]
File Edit Help
Tournaments Home
Tournament Wizard
Player Management
Add/Edit Player Group
Manage Player Alias
Create New Player Group
Edit Existing Player Group
Player Group Name: Bally Bus Group 15
Add Players to the Group
Add New Player
Add From File
Add From existing Group
Player Card# 000000138
Player First Name Bryan
Player Last Name Kelly
Add Player
Current Players List
PLR Card# First Name Last Name
000000138 Bryan Kelly
Plasma Signage Settings
Tournament Reports
Security
Save/Update
Tournament Management Console
User Administrator
Date/Time: 11/8/2007 2:47:54 PM

FIG. 21

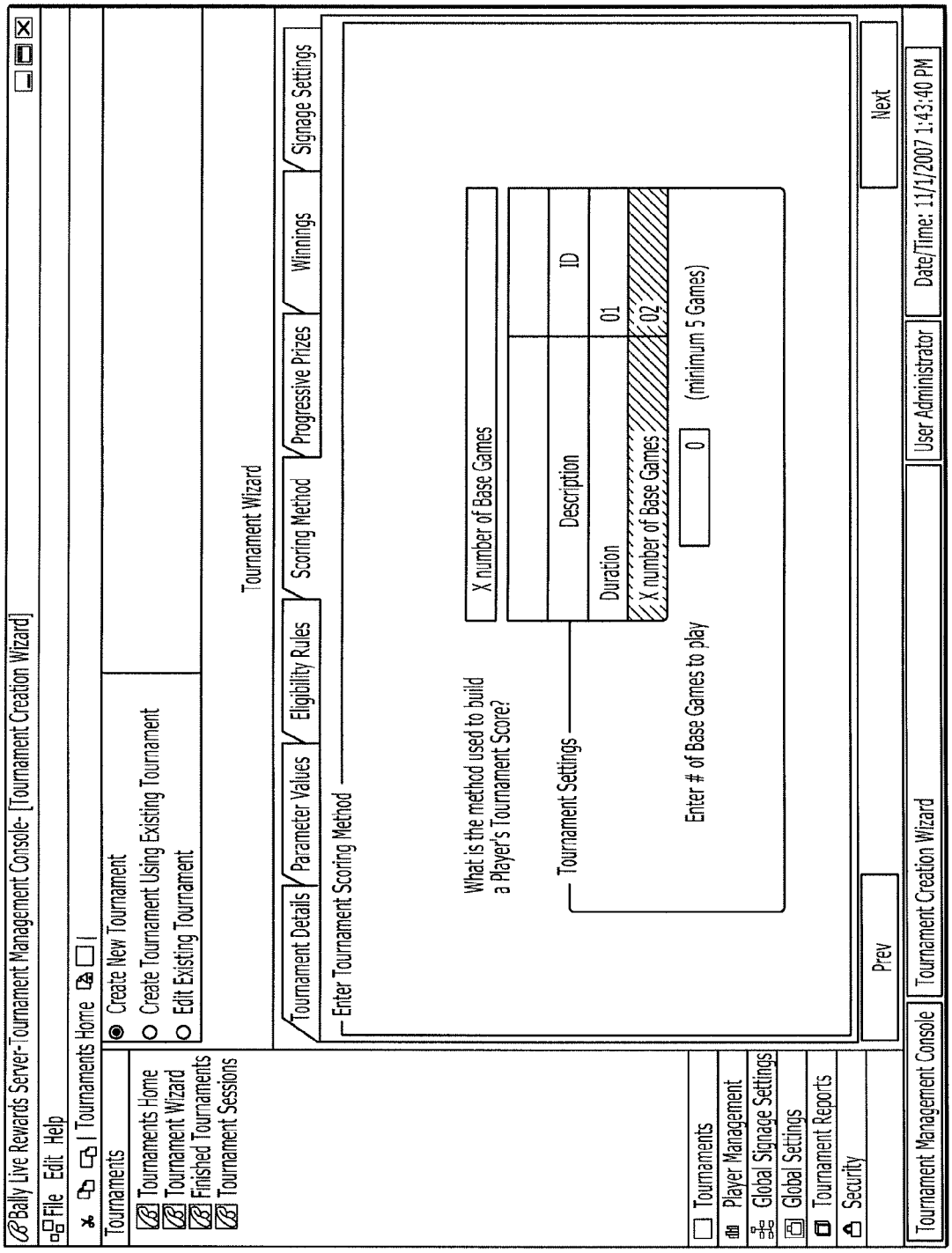

Bally Live Rewards Server- Tournament Management Console- [Tournament Creation Wizard]
File Edit Help
Tournaments Home
Tournaments
Tournaments Home
Tournament Wizard
Finished Tournaments
Tournament Sessions
Create New Tournament
Create Tournament Using Existing Tournament
Edit Existing Tournament
Tournament Wizard
Tournament Details
Parameter Values
Eligibility Rules
Scoring Method
Progressive Prizes
Winnings
Signage Settings
Enter Tournament Scoring Method
What is the method used to build a Player's Tournament Score?
X number of Base Games
Tournament Settings
Description
ID
Duration
01
X number of Base Games
02
Enter # of Base Games to play
0
(minimum 5 Games)
Tournaments
Player Management
Global Signage Settings
Global Settings
Tournament Reports
Security
Prev
Next
Tournament Management Console
Tournament Creation Wizard
User Administrator
Date/Time: 11/1/2007 1:43:40 PM

FIG. 22

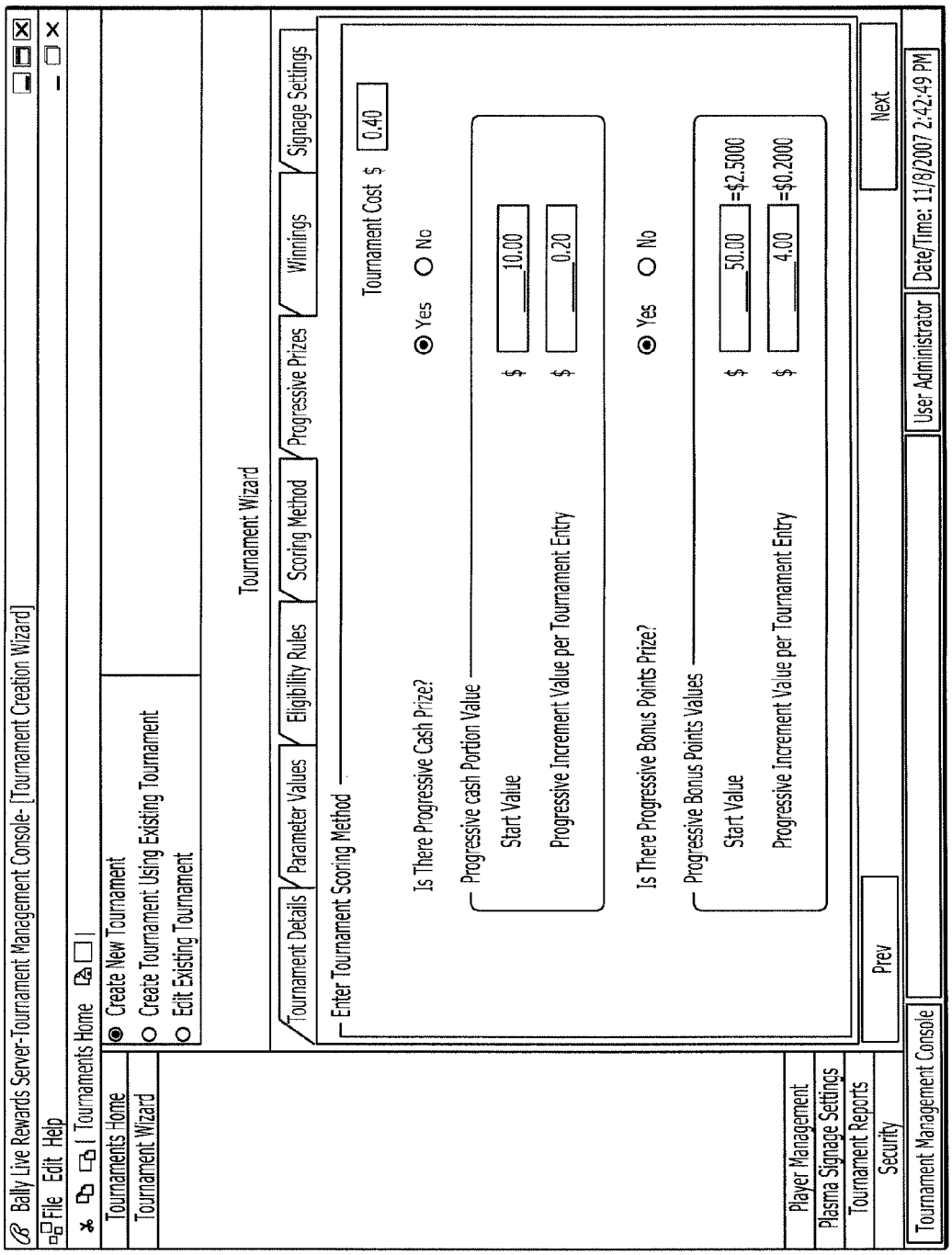

Bally Live Rewards Server-Tournament Management Console- [Tournament Creation Wizard]
File Edit Help
Tournaments Home
Tournaments Home
Tournament Wizard
Create New Tournament
Create Tournament Using Existing Tournament
Edit Existing Tournament
Tournament Wizard
Tournament Details
Parameter Values
Eligibility Rules
Scoring Method
Progressive Prizes
Winnings
Signage Settings
Enter Tournament Scoring Method
Tournament Cost $ 0.40
Is There Progressive Cash Prize?
Yes
No
Progressive cash Portion Value
Start Value $ 10.00
Progressive Increment Value per Tournament Entry $ 0.20
Is There Progressive Bonus Points Prize?
Yes
No
Progressive Bonus Points Values
Start Value $ 50.00 =$2.5000
Progressive Increment Value per Tournament Entry $ 4.00 =$0.2000
Player Management
Plasma Signage Settings
Tournament Reports
Security
Prev
Next
Tournament Management Console
User Administrator
Date/Time: 11/8/2007 2:42:49 PM

FIG. 23

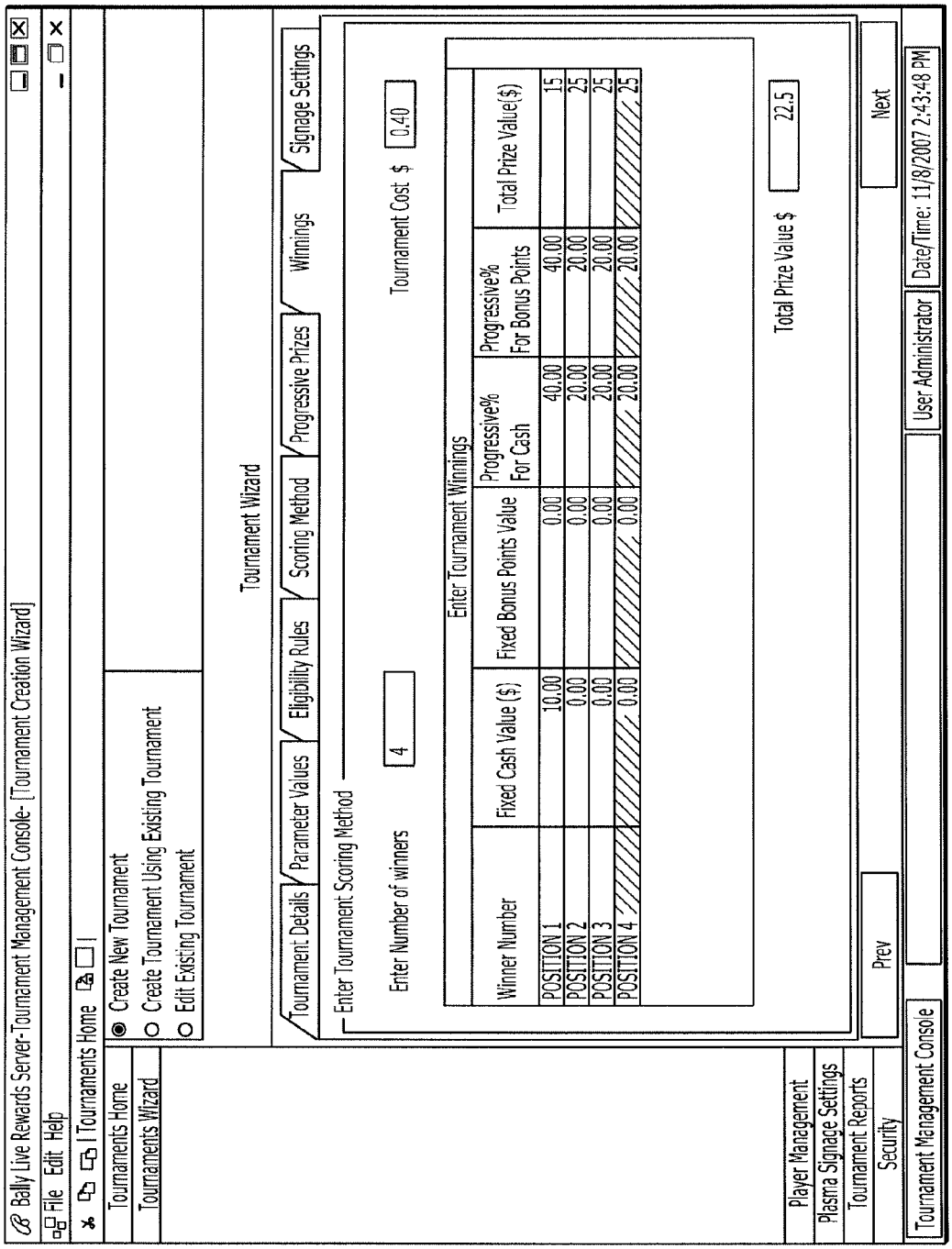

Bally Live Rewards Server-Tournament Management Console- [Tournament Creation Wizard]
File Edit Help
Tournaments Home
Tournaments Home
Tournaments Wizard
Create New Tournament
Create Tournament Using Existing Tournament
Edit Existing Tournament
Tournament Wizard
Tournament Details
Parameter Values
Eligibility Rules
Scoring Method
Progressive Prizes
Winnings
Signage Settings
Enter Tournament Scoring Method
Enter Number of winners 4
Tournament Cost $ 0.40
Enter Tournament Winnings
Winner Number
Fixed Cash Value ($)
Fixed Bonus Points Value
Progressive% For Cash
Progressive% For Bonus Points
Total Prize Value($)
POSITION 1 10.00 0.00 40.00 40.00 15
POSITION 2 0.00 0.00 20.00 20.00 25
POSITION 3 0.00 0.00 20.00 20.00 25
POSITION 4 0.00 0.00 20.00 20.00 25
Total Prize Value $ 22.5
Player Management
Plasma Signage Settings
Tournament Reports
Security
Prev
Next
Tournament Management Console
User Administrator
Date/Time: 11/8/2007 2:43:48 PM

FIG. 24

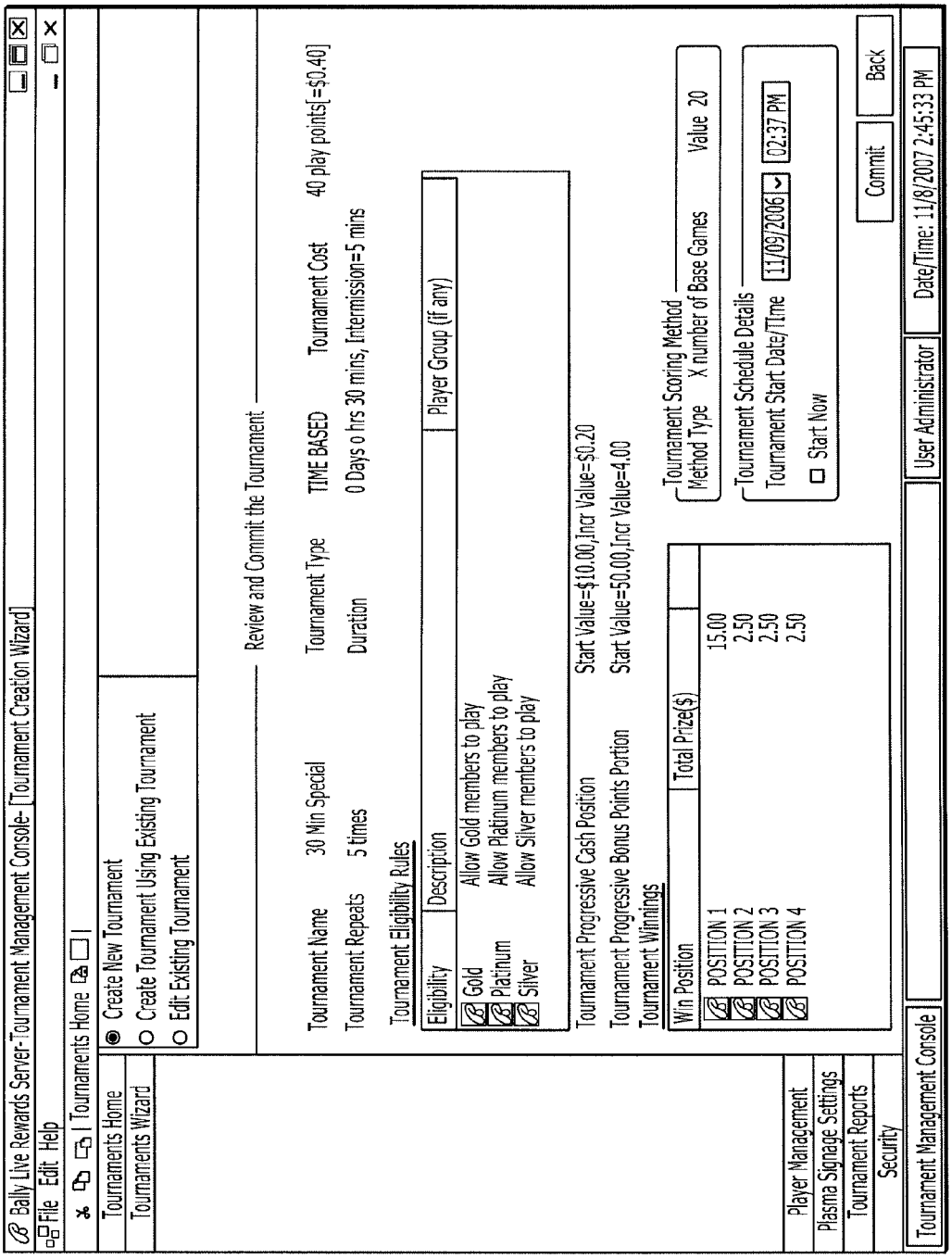

Bally Live Rewards Server-Tournament Management Console- [Tournament Creation Wizard]
File Edit Help
Tournaments Home
Tournaments Wizard
Player Management
Plasma Signage Settings
Tournament Reports
Security
Create New Tournament
Create Tournament Using Existing Tournament
Edit Existing Tournament
Review and Commit the Tournament
Tournament Name 30 Min Special
Tournament Type TIME BASED
Tournament Cost 40 play points[=$0.40]
Tournament Repeats 5 times
Duration 0 Days o hrs 30 mins, Intermission=5 mins
Tournament Eligibility Rules
Eligibility
Description
Player Group (if any)
Gold Allow Gold members to play
Platinum Allow Platinum members to play
Silver Allow Silver members to play
Tournament Progressive Cash Position Start Value=$10.00,Incr Value=$0.20
Tournament Progressive Bonus Points Portion Start Value=$0.00,Incr Value=4.00
Tournament Winnings
Win Position
Total Prize($)
POSITION 1 15.00
POSITION 2 2.50
POSITION 3 2.50
POSITION 4 2.50
Tournament Scoring Method
Method Type X number of Base Games Value 20
Tournament Schedule Details
Tournament Start Date/Time 11/09/2006 02:37 PM
Start Now
Commit
Back
Tournament Management Console
User Administrator
Date/Time: 11/8/2007 2:45:33 PM

FIG. 25

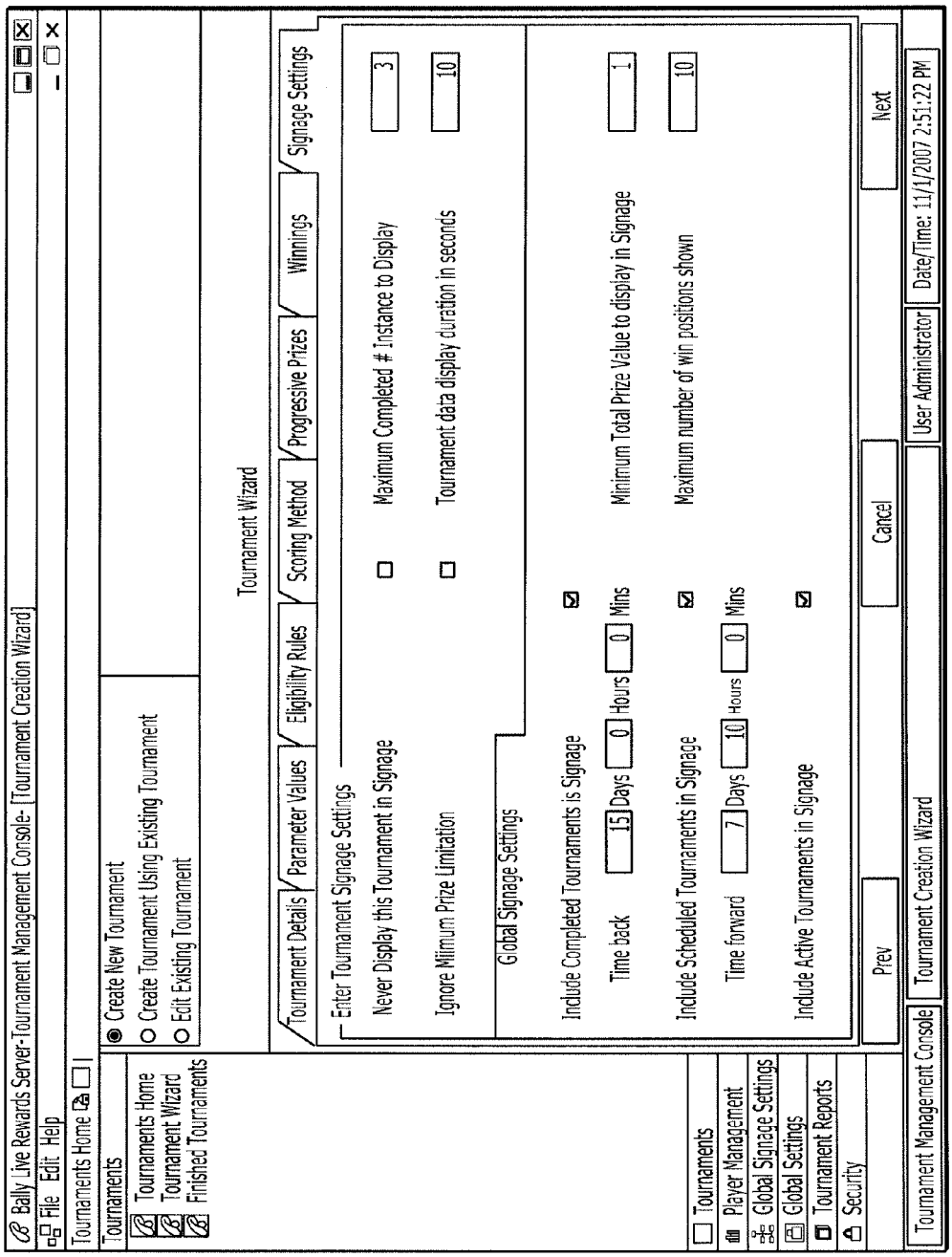

Bally Live Rewards Server-Tournament Management Console- [Tournament Creation Wizard]
File Edit Help
Tournaments Home
Tournaments
Tournaments Home
Tournament Wizard
Finished Tournaments
Create New Tournament
Create Tournament Using Existing Tournament
Edit Existing Tournament
Tournament Wizard
Tournament Details
Parameter Values
Eligibility Rules
Scoring Method
Progressive Prizes
Winnings
Signage Settings
Enter Tournament Signage Settings
Never Display this Tournament in Signage
Maximum Completed # Instance to Display
3
Ignore Minimum Prize Limitation
Tournament data display duration in seconds
10
Global Signage Settings
Include Completed Tournaments is Signage
Time back
15 Days 0 Hours 0 Mins
Minimum Total Prize Value to display in Signage
1
Include Scheduled Tournaments in Signage
Time forward
7 Days 10 Hours 0 Mins
Maximum number of win positions shown
10
Include Active Tournaments in Signage
Prev
Cancel
Next
Tournaments
Player Management
Global Signage Settings
Global Settings
Tournament Reports
Security
Tournament Management Console
Tournament Creation Wizard
User Administrator
Date/Time: 11/1/2007 2:51:22 PM

FIG. 26

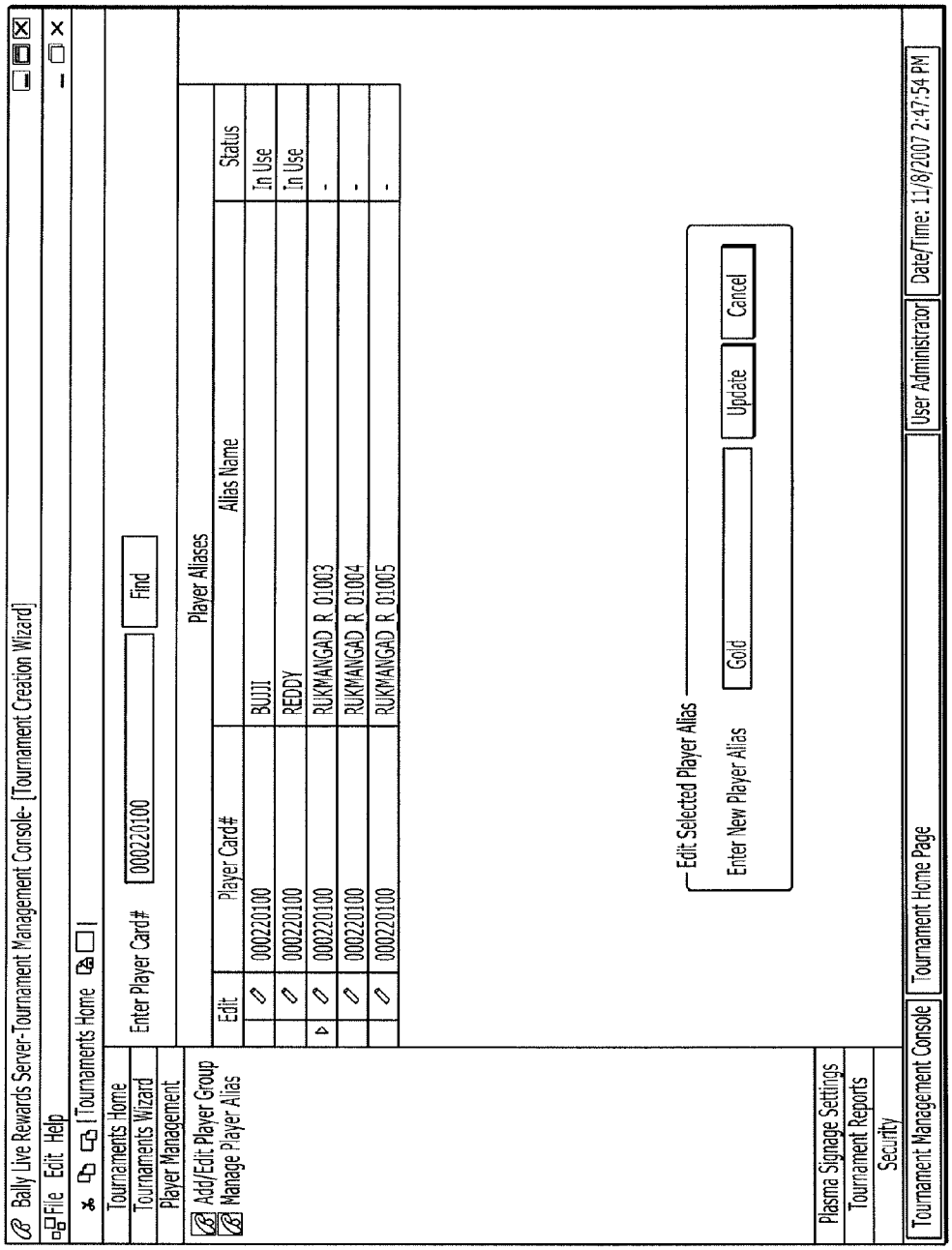

Bally Live Rewards Server-Tournament Management Console- [Tournament Creation Wizard]
File Edit Help
Tournaments Home
Tournaments Home
Tournaments Wizard
Player Management
Add/Edit Player Group
Manage Player Alias
Enter Player Card#
000220100
Find
Player Aliases
Edit
Player Card#
Alias Name
Status
000220100
BUJJI
In Use
000220100
REDDY
In Use
000220100
RUKMANGAD R 01003
-
000220100
RUKMANGAD R 01004
-
000220100
RUKMANGAD R 01005
-
Edit Selected Player Alias
Enter New Player Alias
Gold
Update
Cancel
Plasma Signage Settings
Tournament Reports
Security
Tournament Management Console
Tournament Home Page
User Administrator
Date/Time: 11/8/2007 2:47:54 PM

FIG. 27

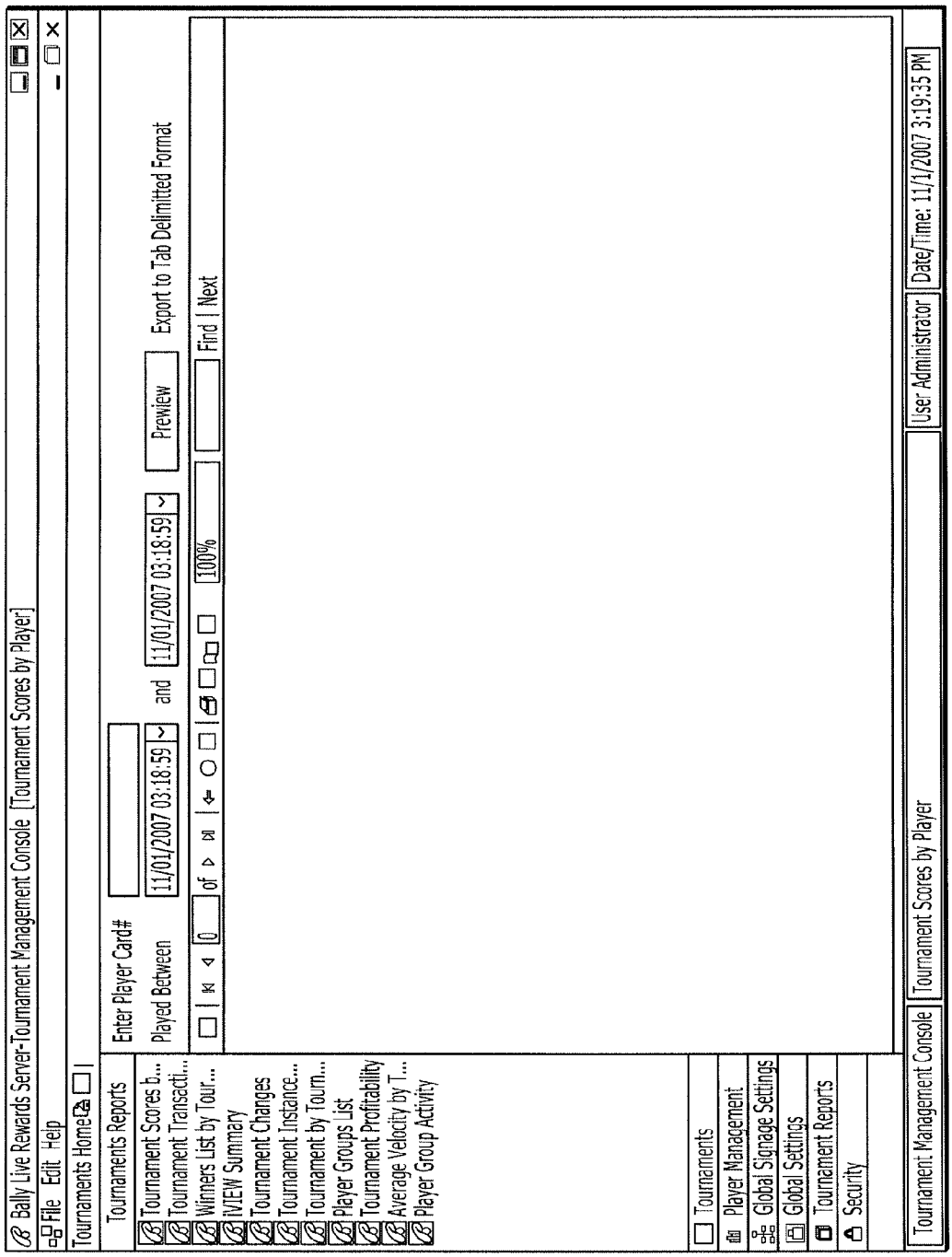

Bally Live Rewards Server-Tournament Management Console [Tournament Scores by Player]
File Edit Help
Tournaments Home
Tournaments Reports
Tournament Scores b...
Tournament Transacti...
Winners List by Tour...
iVIEW Summary
Tournament Changes
Tournament Instance...
Tournament by Tourn...
Player Groups List
Tournament Profitability
Average Velocity by T...
Player Group Activity
Enter Player Card#
Played Between
11/01/2007 03:18:59
and
11/01/2007 03:18:59
Preview
Export to Tab Delimited Format
of
100%
Find | Next
Tournaments
Player Management
Global Signage Settings
Global Settings
Tournament Reports
Security
Tournament Management Console
Tournament Scores by Player
User Administrator
Date/Time: 11/1/2007 3:19:35 PM

FIG. 28

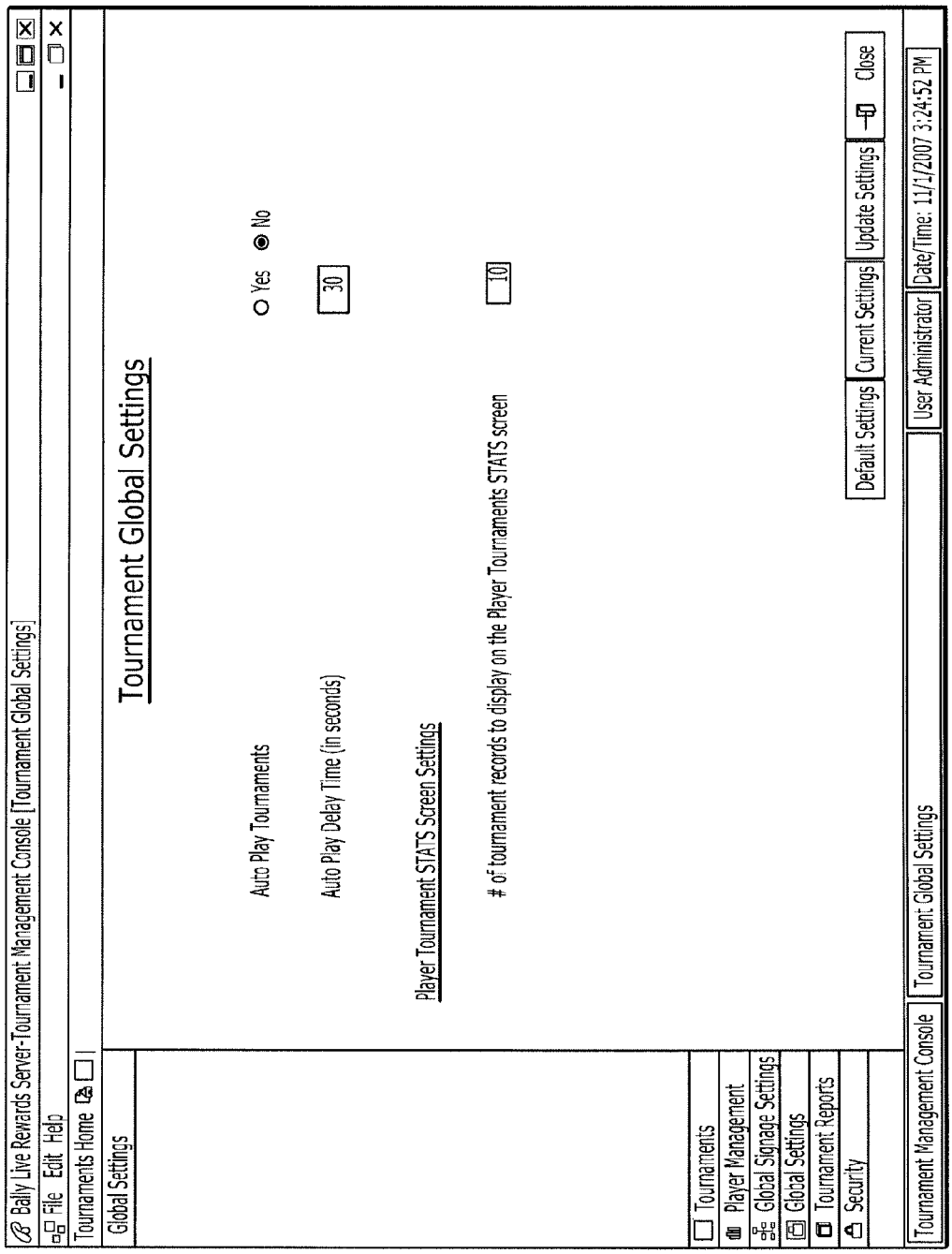

Bally Live Rewards Server-Tournament Management Console [Tournament Global Settings]
File Edit Help
Tournaments Home
Global Settings
Tournament Global Settings
Auto Play Tournaments
Yes
No
Auto Play Delay Time (in seconds)
30
Player Tournament STATS Screen Settings
# of tournament records to display on the Player Tournaments STATS screen
10
Default Settings
Current Settings
Update Settings
Close
Tournaments
Player Management
Global Signage Settings
Global Settings
Tournament Reports
Security
Tournament Management Console
Tournament Global Settings
User Administrator
Date/Time: 11/1/2007 3:24:52 PM

FIG. 29

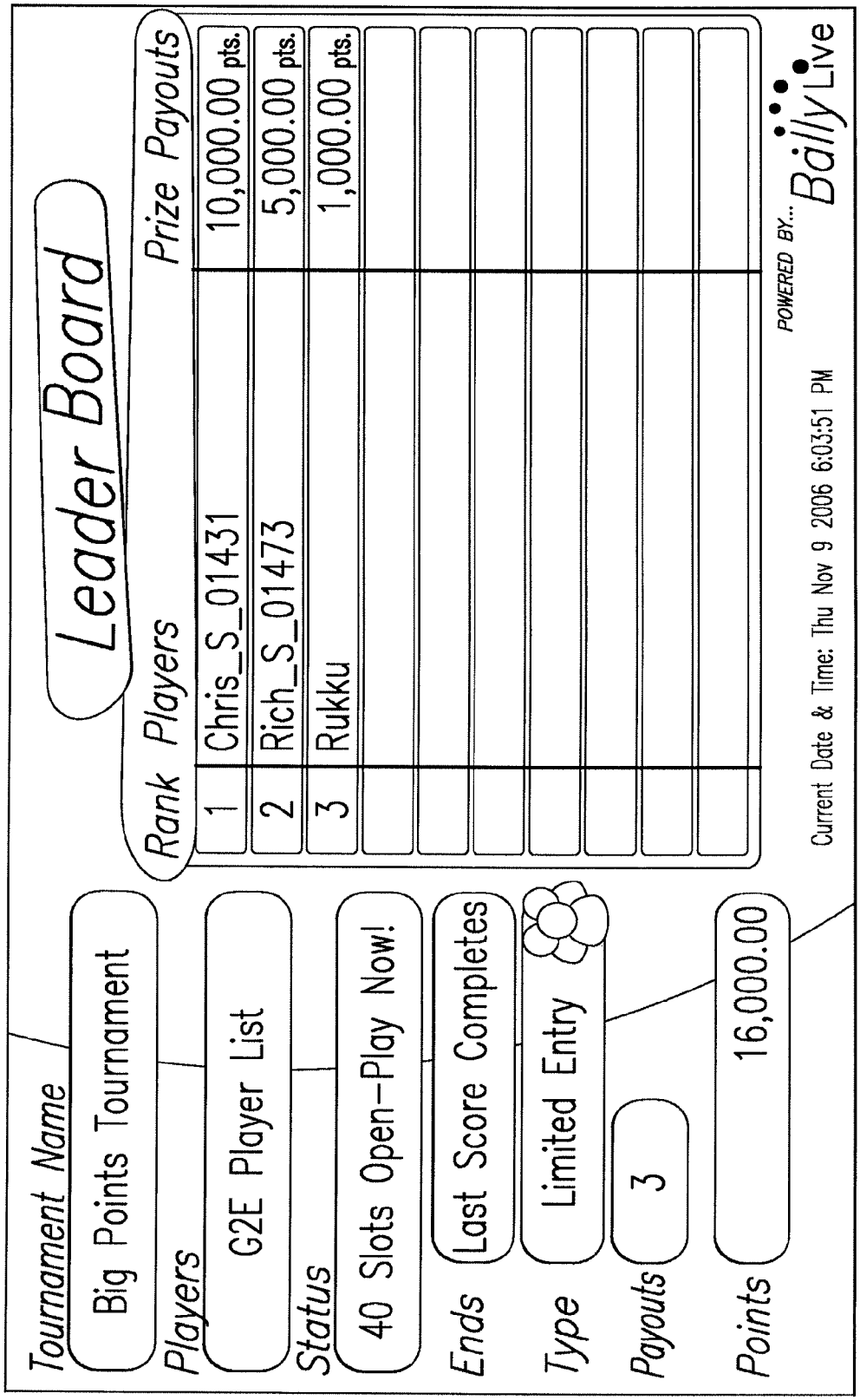

Leader Board
Tournament Name
Big Points Tournament
Players
G2E Player List
Status
40 Slots Open-Play Now!
Ends
Last Score Completes
Type
Limited Entry
Payouts
3
Points
16,000.00
Rank
Players
Prize Payouts
1
Chris_S_01431
10,000.00 pts.
2
Rich_S_01473
5,000.00 pts.
3
Rukku
1,000.00 pts.
Current Date & Time: Thu Nov 9 2006 6:03:51 PM
POWERED BY...
Bally Live

FIG.30

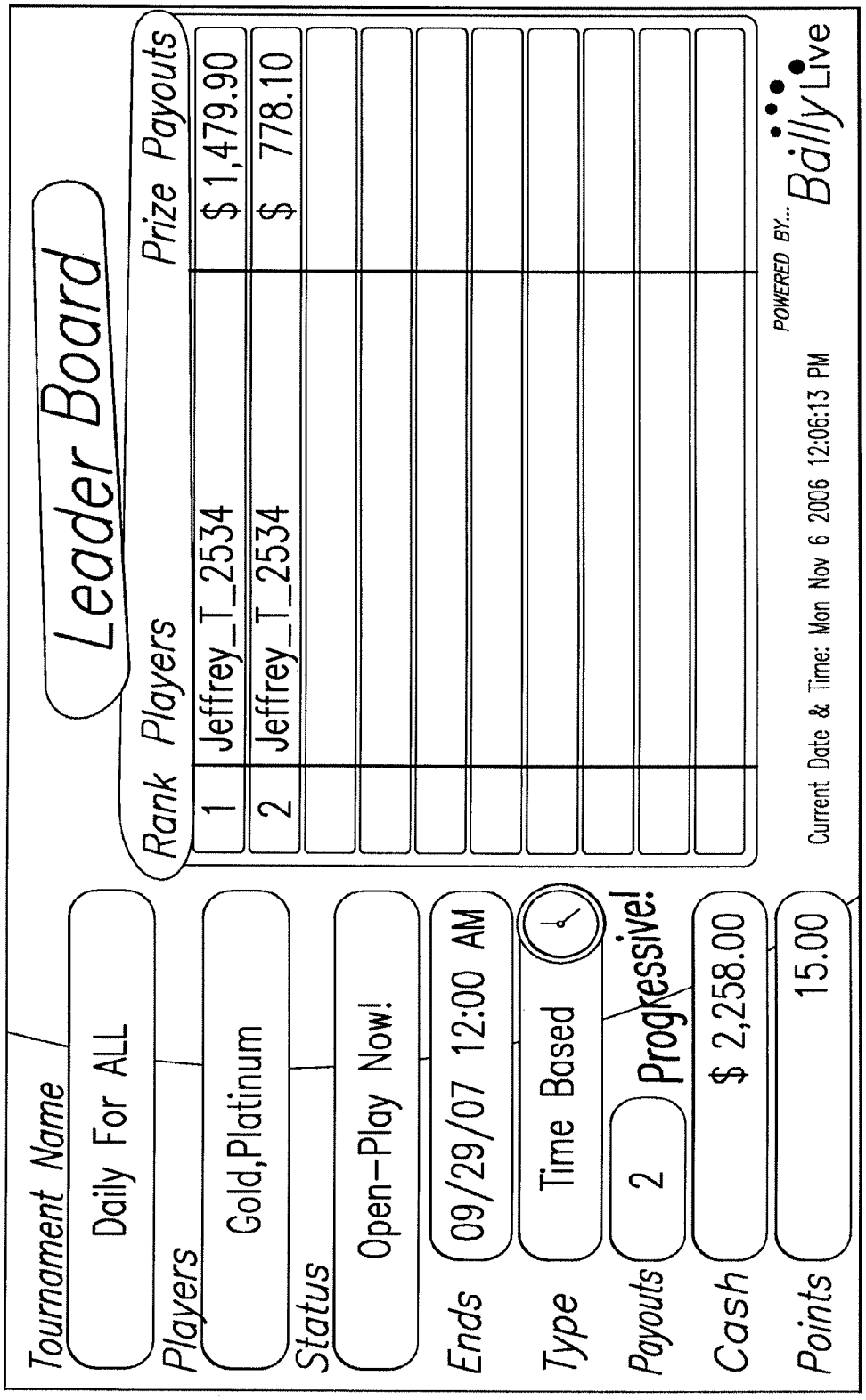

Leader Board
Tournament Name
Daily For ALL
Players
Gold,Platinum
Status
Open–Play Now!
Ends
09/29/07 12:00 AM
Type
Time Based
Payouts
2
Progressive!
Cash
$ 2,258.00
Points
15.00
Rank Players
Prize Payouts
1 Jeffrey_T_2534
$ 1,479.90
2 Jeffrey_T_2534
$ 778.10
Current Date & Time: Mon Nov 6 2006 12:06:13 PM
POWERED BY...
Bally Live

FIG.31

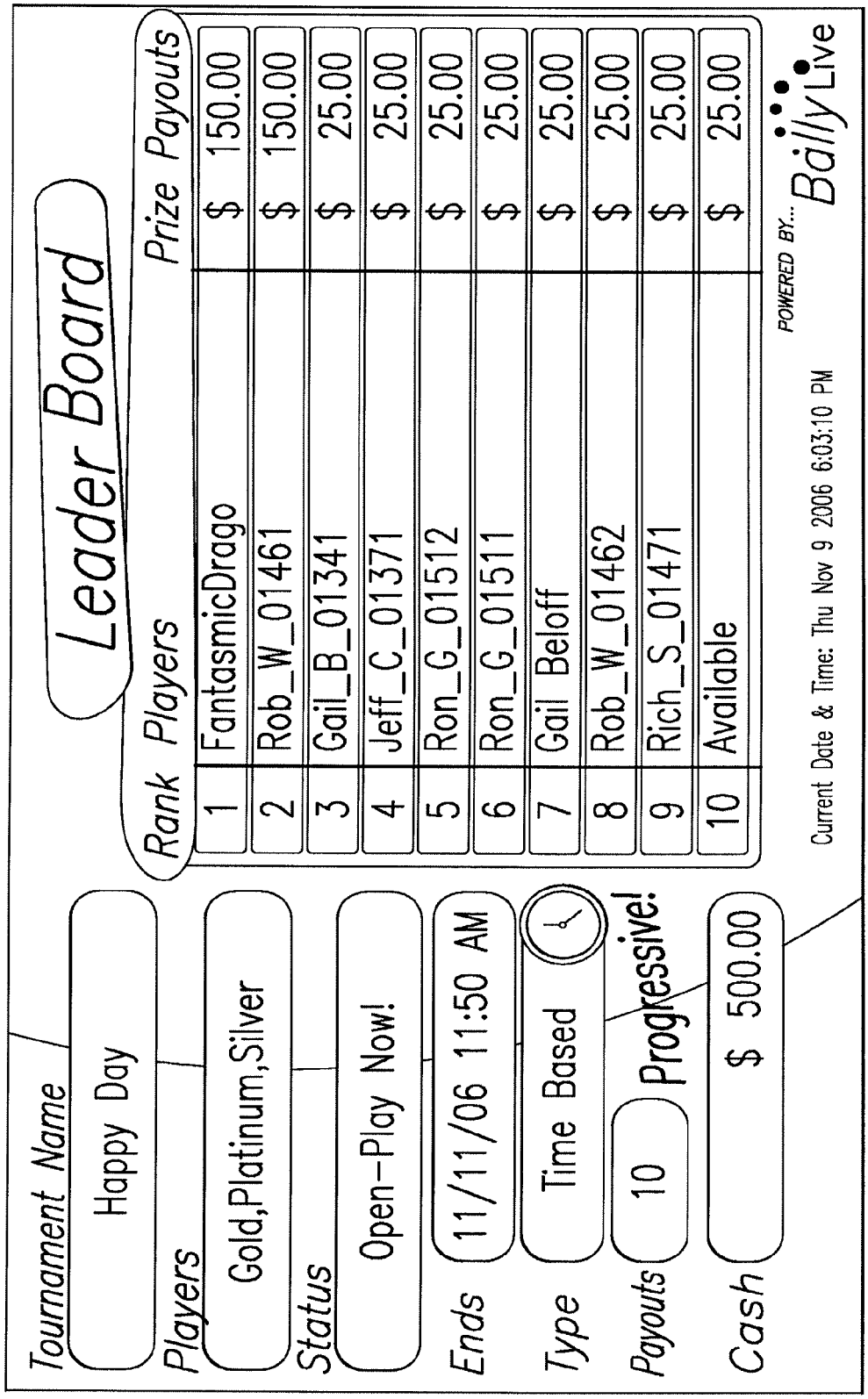

Leader Board
Tournament Name
Happy Day
Players
Gold,Platinum,Silver
Status
Open–Play Now!
Ends
11/11/06 11:50 AM
Type
Time Based
Payouts
10
Progressive!
Cash
$ 500.00
Rank
Players
Prize Payouts
1 FantasmicDrago $ 150.00
2 Rob_W_01461 $ 150.00
3 Gail_B_01341 $ 25.00
4 Jeff_C_01371 $ 25.00
5 Ron_G_01512 $ 25.00
6 Ron_G_01511 $ 25.00
7 Gail Beloff $ 25.00
8 Rob_W_01462 $ 25.00
9 Rich_S_01471 $ 25.00
10 Available $ 25.00
Current Date & Time: Thu Nov 9 2006 6:03:10 PM
POWERED BY...
Bally Live

FIG.32

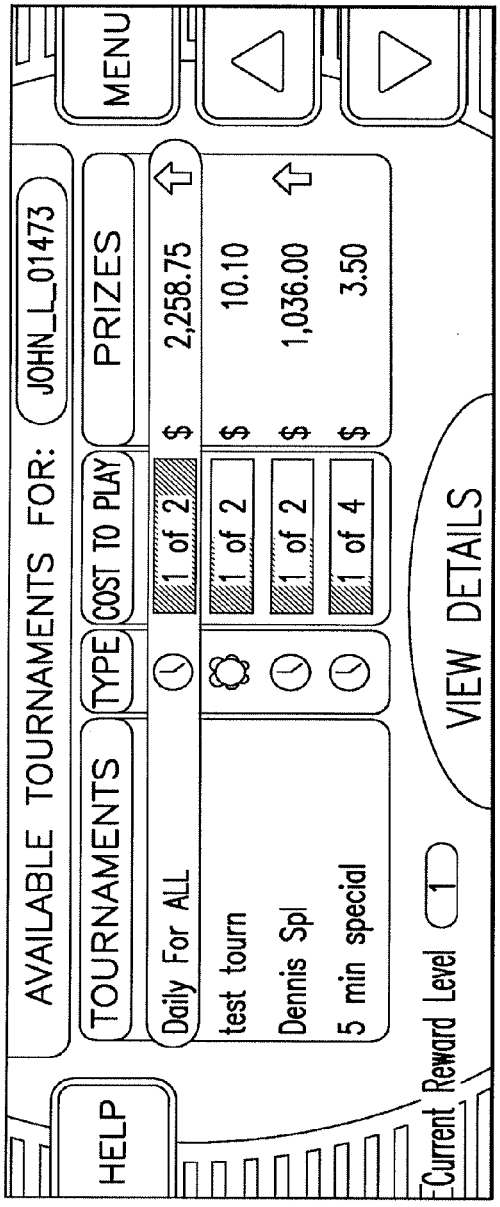

HELP
AVAILABLE TOURNAMENTS FOR:
JOHN_L_01473
MENU
TOURNAMENTS
TYPE
COST TO PLAY
PRIZES
Daily For ALL
1 of 2
$ 2,258.75
test tourn
1 of 2
$ 10.10
Dennis Spl
1 of 2
$ 1,036.00
5 min special
1 of 4
$ 3.50
VIEW DETAILS
Current Reward Level
1

FIG.33

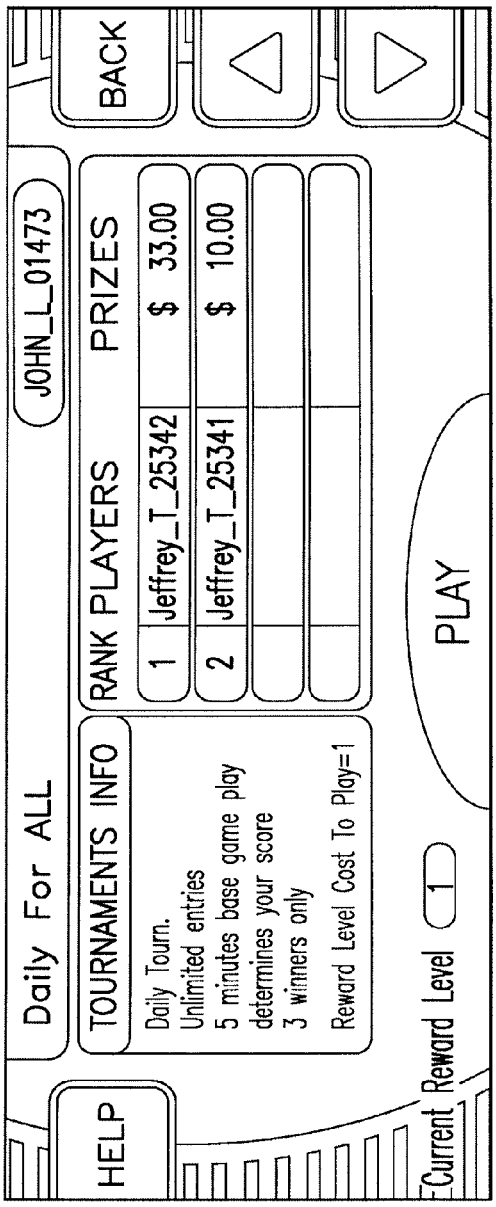

HELP
Daily For ALL
JOHN_L_01473
BACK
TOURNAMENTS INFO
Daily Tourn.
Unlimited entries
5 minutes base game play
determines your score
3 winners only
Reward Level Cost To Play=1
RANK PLAYERS
PRIZES
1
Jeffrey_T_25342
$ 33.00
2
Jeffrey_T_25341
$ 10.00
PLAY
Current Reward Level
1

FIG.34

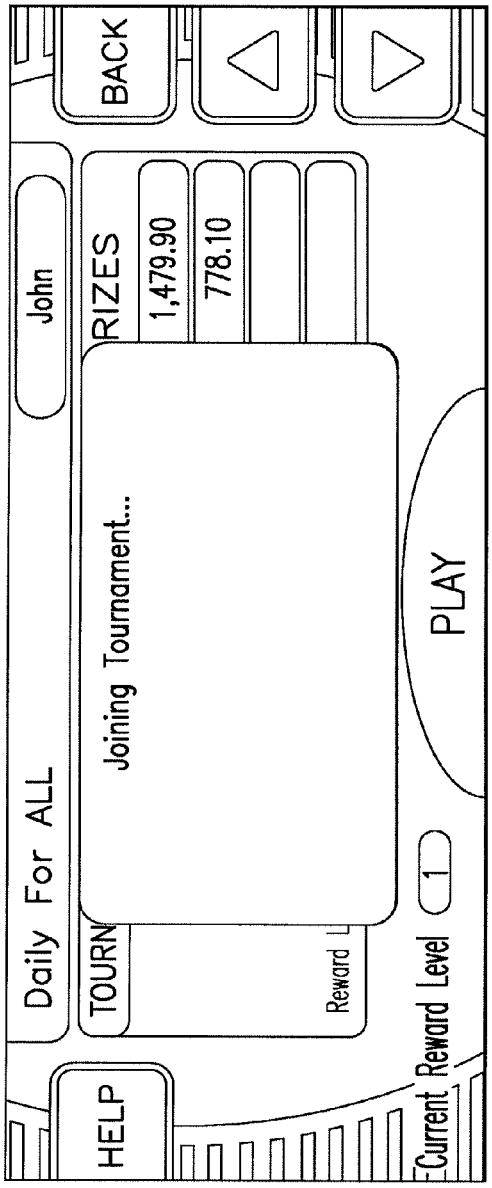

HELP
Daily For ALL
John
BACK
TOURN
RIZES
1,479.90
778.10
Joining Tournament...
Reward L
PLAY
Current Reward Level
1

FIG.35

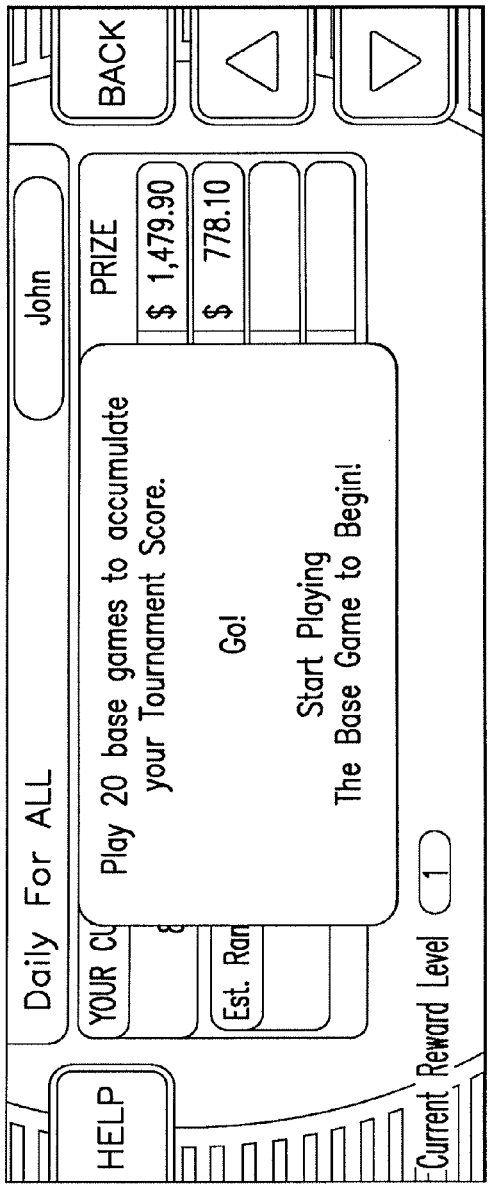

HELP
Daily For ALL
John
BACK
YOUR C
PRIZE
$ 1,479.90
$ 778.10
Est. Ran
Play 20 base games to accumulate your Tournament Score.
Go!
Start Playing
The Base Game to Begin!
Current Reward Level
1

FIG.36

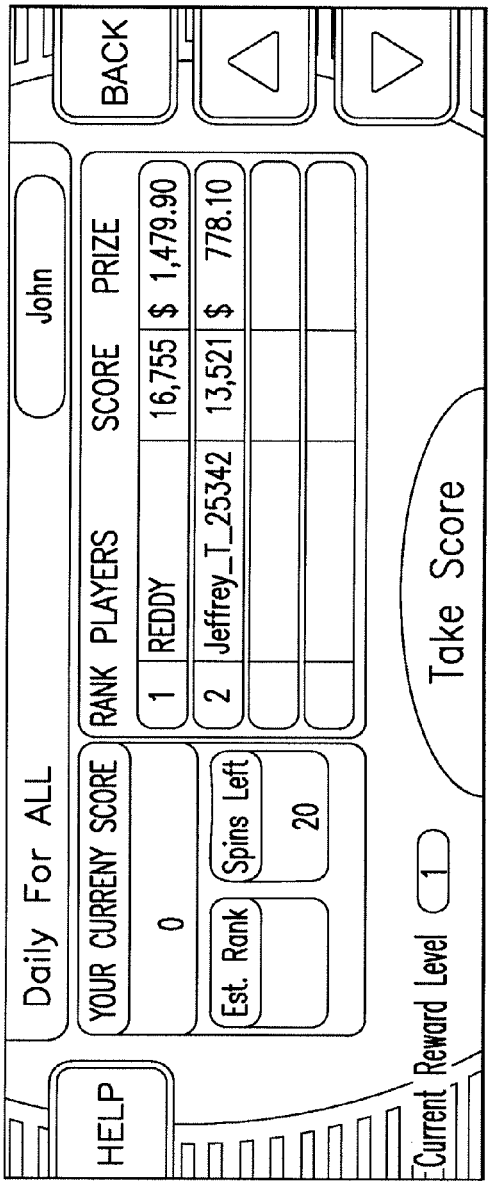

HELP
Daily For ALL
John
BACK
YOUR CURRENY SCORE
0
Est. Rank
Spins Left
20
RANK PLAYERS SCORE PRIZE
1 REDDY 16,755 $ 1,479.90
2 Jeffrey_T_25342 13,521 $ 778.10
Take Score
Current Reward Level 1

FIG.37

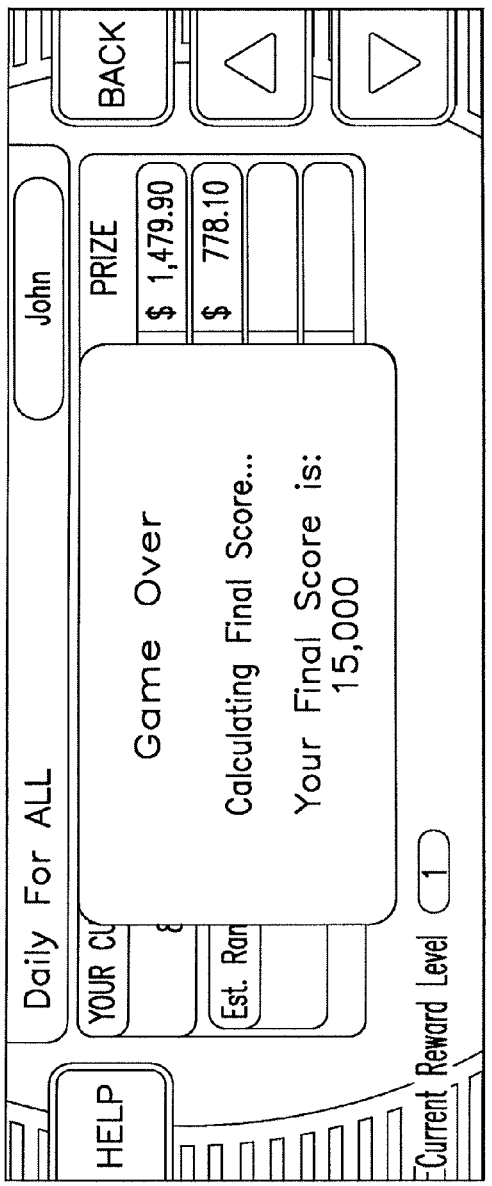

HELP
Daily For ALL
John
BACK
PRIZE
$ 1,479.90
$ 778.10
Game Over
Calculating Final Score...
Your Final Score is:
15,000
Current Reward Level 1

FIG.38

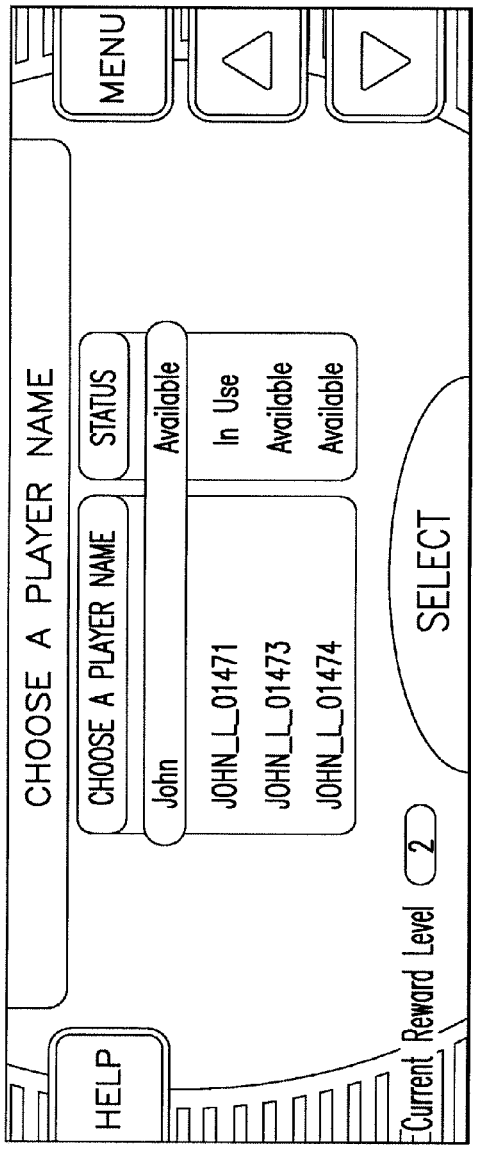

CHOOSE A PLAYER NAME
MENU
CHOOSE A PLAYER NAME
STATUS
John
Available
JOHN_LL_01471
In Use
JOHN_LL_01473
Available
JOHN_LL_01474
Available
SELECT
HELP
Current Reward Level
2

FIG.39

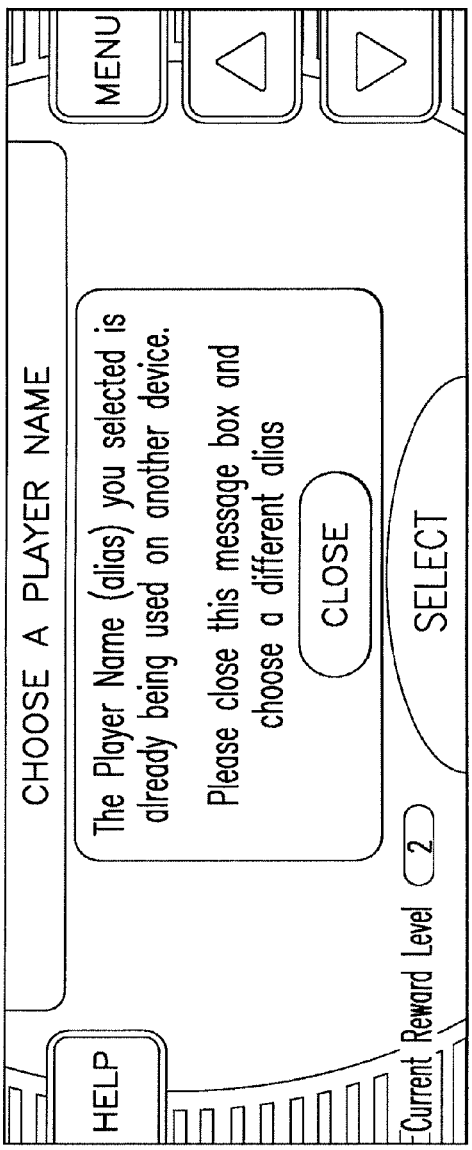

CHOOSE A PLAYER NAME
MENU
The Player Name (alias) you selected is already being used on another device.
Please close this message box and choose a different alias
CLOSE
SELECT
HELP
Current Reward Level
2

FIG.40

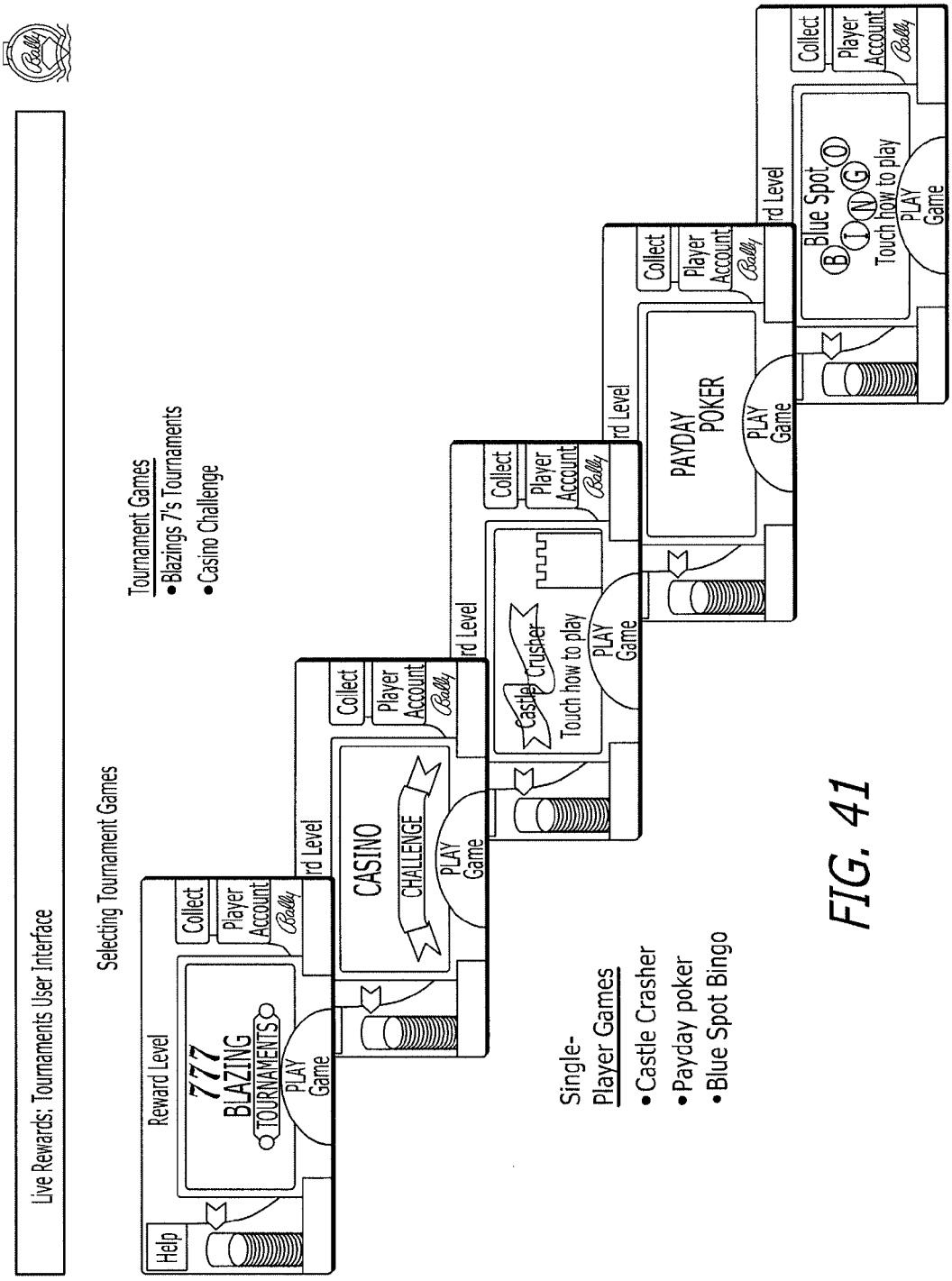

Live Rewards: Tournaments User Interface
Selecting Tournament Games
Tournament Games
•Blazings 7's Tournaments
•Casino Challenge
Single-Player Games
•Castle Crasher
•Payday poker
•Blue Spot Bingo
Help
Reward Level
777 BLAZING TOURNAMENTS
PLAY Game
Collect
Player Account
CASINO
CHALLENGE
Castle Crusher
Touch how to play
PAYDAY POKER
Blue Spot BINGO
Touch how to play

FIG. 41

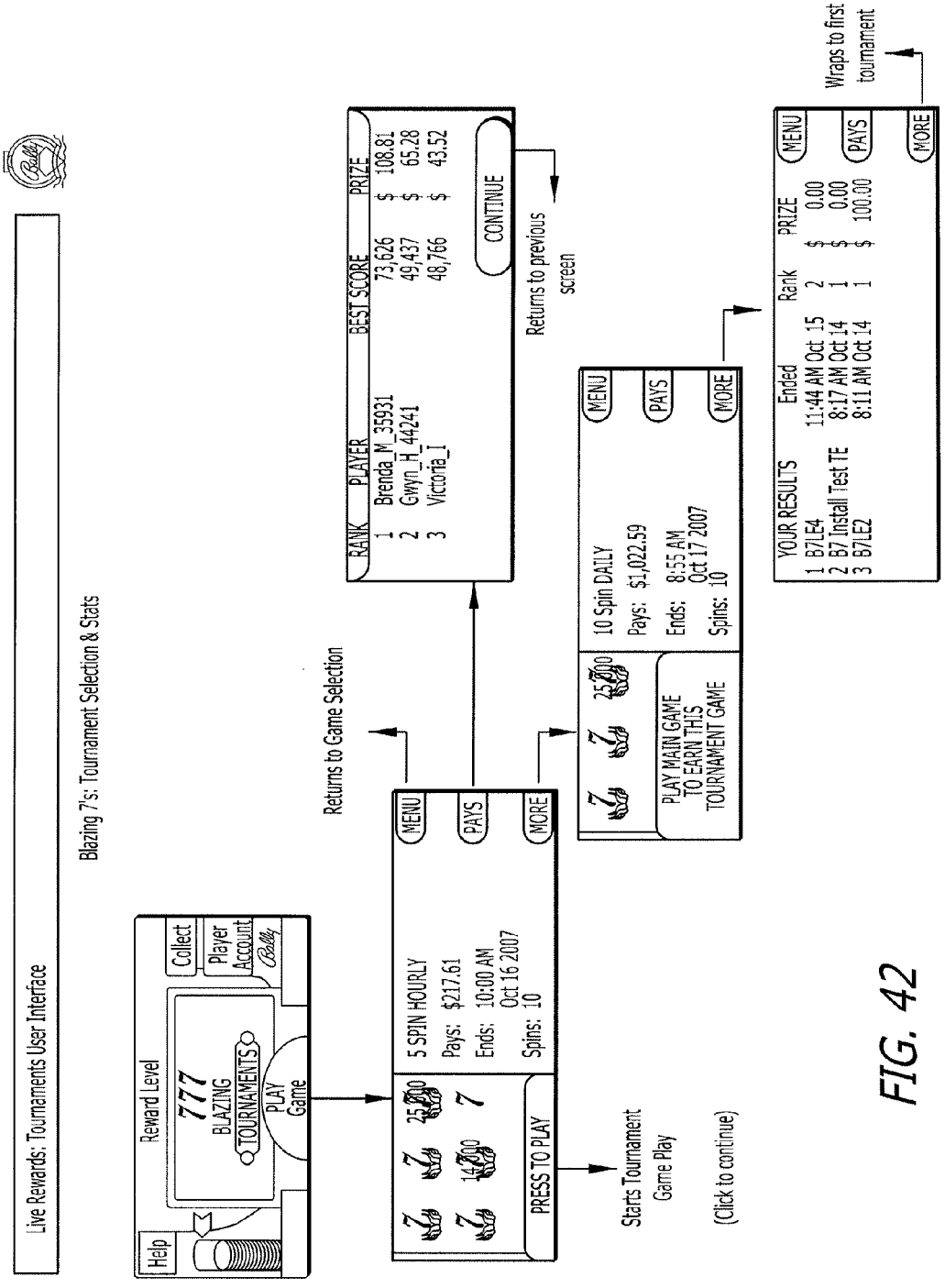

Live Rewards: Tournaments User Interface
Blazing 7's: Tournament Selection & Stats
Help
Reward Level
Collect
Player Account
777
BLAZING
TOURNAMENTS
PLAY
Game
5 SPIN HOURLY
Pays: $217.61
Ends: 10:00 AM
Oct 16 2007
Spins: 10
PRESS TO PLAY
MENU
PAYS
MORE
Returns to Game Selection
Starts Tournament
Game Play
(Click to continue)
RANK PLAYER BEST SCORE PRIZE
1 Brenda_M_35931 73,626 $ 108.81
2 Gwyn_H_44241 49,437 $ 65.28
3 Victoria_I 48,766 $ 43.52
CONTINUE
Returns to previous
screen
10 Spin DAILY
Pays: $1,022.59
Ends: 8:55 AM
Oct 17 2007
Spins: 10
PLAY MAIN GAME
TO EARN THIS
TOURNAMENT GAME
MENU
PAYS
MORE
YOUR RESULTS Ended Rank PRIZE
1 B7LE4 11:44 AM Oct 15 2 $ 0.00
2 B7 Install Test TE 8:17 AM Oct 14 1 $ 0.00
3 B7LE2 8:11 AM Oct 14 1 $ 100.00
MENU
PAYS
MORE
Wraps to first
tournament

FIG. 42

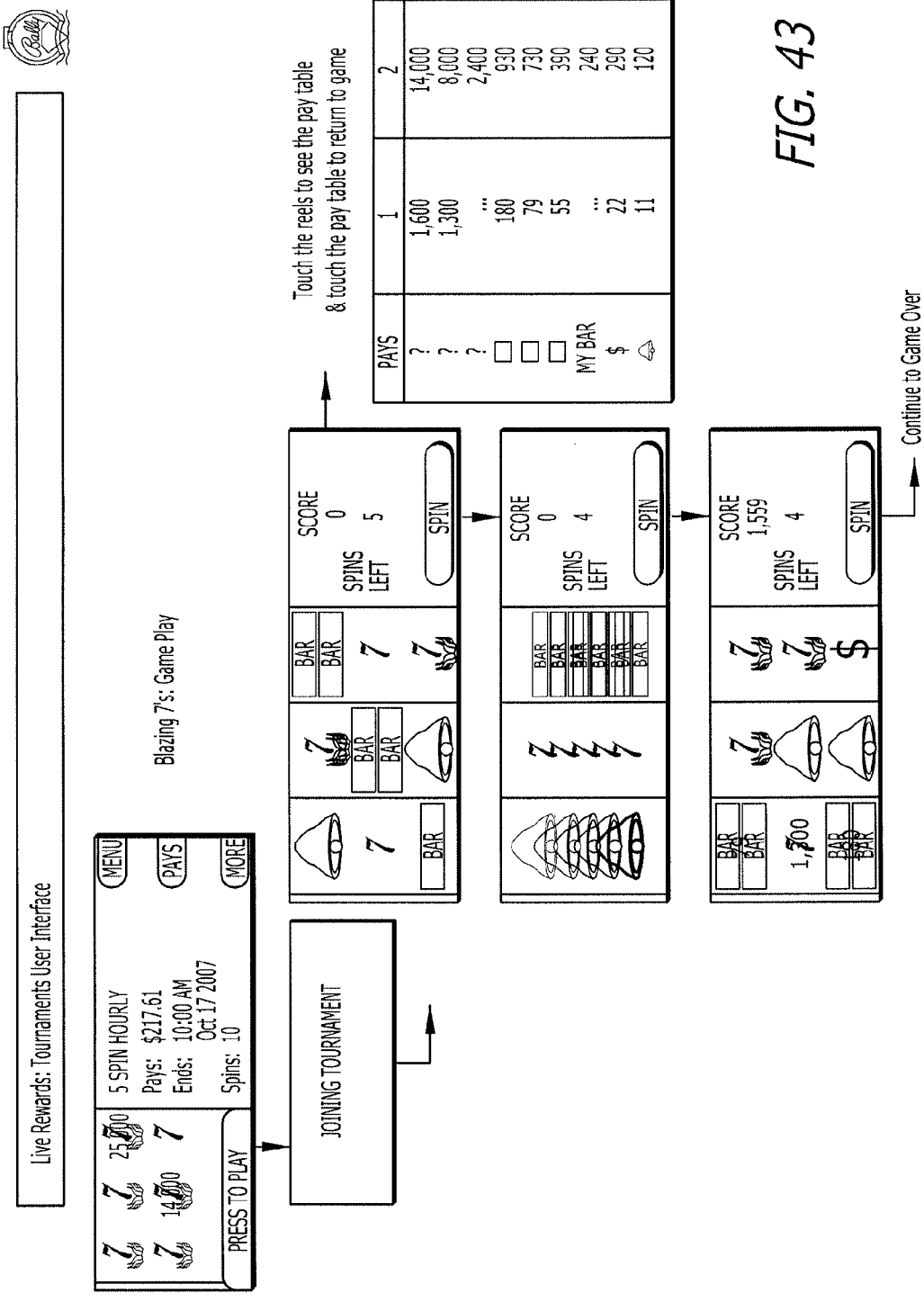

Live Rewards: Tournaments User Interface
Blazing 7's: Game Play
5 SPIN HOURLY
Pays: $217.61
Ends: 10:00 AM Oct 17 2007
Spins: 10
MENU
PAYS
MORE
PRESS TO PLAY
JOINING TOURNAMENT
SCORE 0
SPINS LEFT 5
SPIN
Touch the reels to see the pay table & touch the pay table to return to game
PAYS 1 2 3
? 1,600 14,000 25,000
? 1,300 8,000 19,000
? ... 2,400 5,800
180 930 7,300
79 730 3,700
55 390 2,800
MY BAR 240 560
$ 22 290 890
11 120 430
SCORE 0
SPINS LEFT 4
SPIN
SCORE 1,559
SPINS LEFT 4
SPIN
Continue to Game Over

FIG. 43

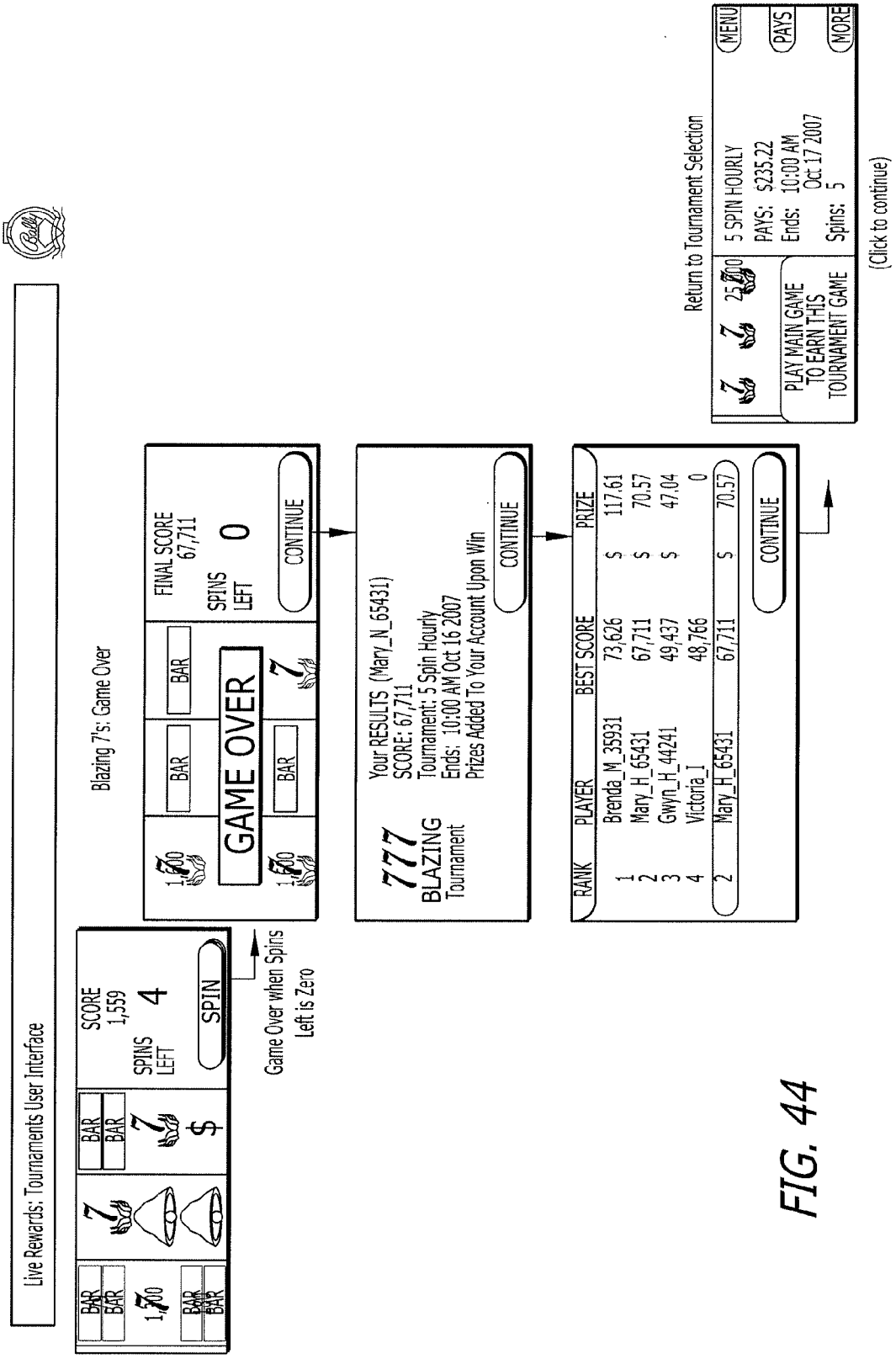

Live Rewards: Tournaments User Interface
Blazing 7's: Game Over
SCORE 1,559
SPINS LEFT 4
SPIN
Game Over when Spins Left is Zero
FINAL SCORE 67,711
SPINS LEFT 0
GAME OVER
CONTINUE
777 BLAZING Tournament
Your RESULTS (Mary_N_65431)
SCORE: 67,711
Tournament: 5 Spin Hourly
Ends: 10:00 AM Oct 16 2007
Prizes Added To Your Account Upon Win
CONTINUE
RANK PLAYER BEST SCORE PRIZE
1 Brenda_M_35931 73,626 $ 117.61
2 Mary_H_65431 67,711 $ 70.57
3 Gwyn_H_44241 49,437 $ 47.04
4 Victoria_I 48,766 0
2 Mary_H_65431 67,711 $ 70.57
CONTINUE
Return to Tournament Selection
PLAY MAIN GAME TO EARN THIS TOURNAMENT GAME
5 SPIN HOURLY
PAYS: $235.22
Ends: 10:00 AM Oct 17 2007
Spins: 5
MENU
PAYS
MORE
(Click to continue)

FIG. 44

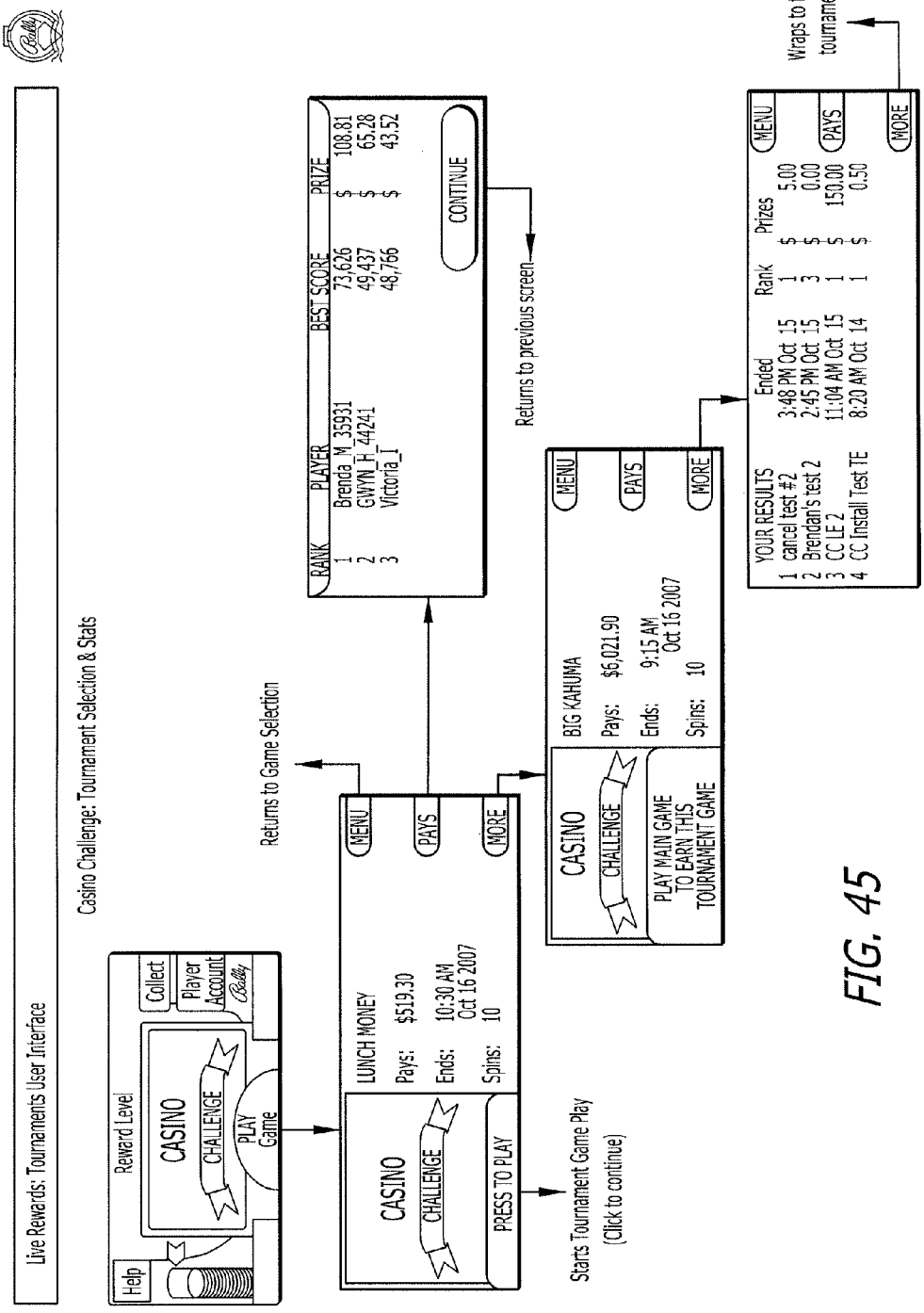

Live Rewards: Tournaments User Interface
Casino Challenge: Tournament Selection & Stats
Reward Level
Collect
Player Account
CASINO
CHALLENGE
PLAY Game
Help
Returns to Game Selection
LUNCH MONEY
Pays: $519.30
Ends: 10:30 AM Oct 16 2007
Spins: 10
MENU
PAYS
MORE
CASINO
CHALLENGE
PRESS TO PLAY
Starts Tournament Game Play (Click to continue)
RANK PLAYER BEST SCORE PRIZE
1 Brenda_M_35931 73,626 $ 108.81
2 GWYN_H_44241 49,437 $ 65.28
3 Victoria_T 48,766 $ 43.52
CONTINUE
Returns to previous screen
BIG KAHUNA
Pays: $6,021.90
Ends: 9:15 AM Oct 16 2007
Spins: 10
CASINO
CHALLENGE
PLAY MAIN GAME TO EARN THIS TOURNAMENT GAME
MENU
PAYS
MORE
YOUR RESULTS Ended Rank Prizes
1 cancel test #2 3:48 PM Oct 15 1 $ 5.00
2 Brendan's test 2 2:45 PM Oct 15 3 $ 0.00
3 CC LE 2 11:04 AM Oct 15 1 $ 150.00
4 CC Install Test TE 8:20 AM Oct 14 1 $ 0.50
MENU
PAYS
MORE
Wraps to first tournament

FIG. 45

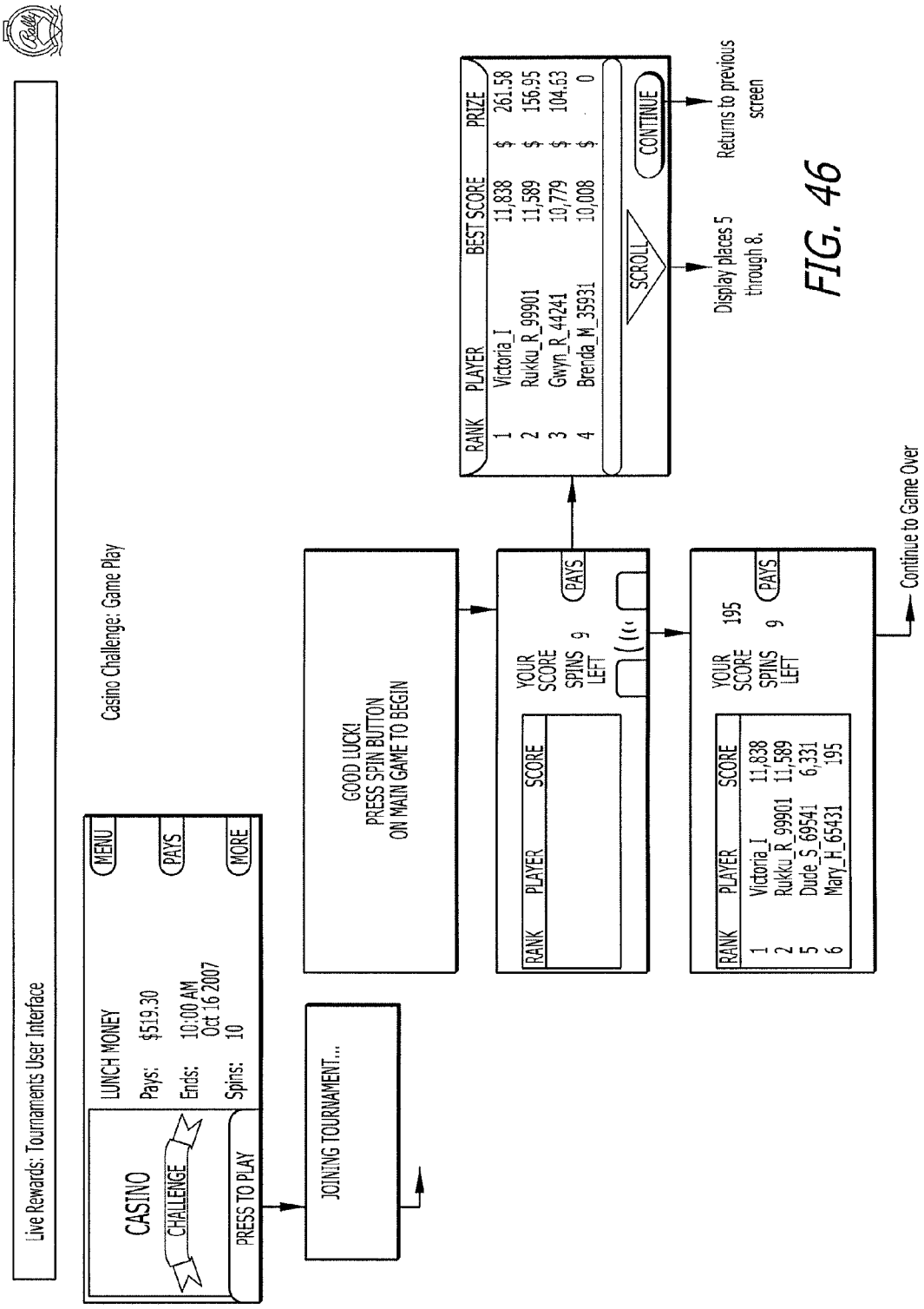

Live Rewards: Tournaments User Interface
Casino Challenge: Game Play
CASINO
CHALLENGE
PRESS TO PLAY
LUNCH MONEY
Pays: $519.30
Ends: 10:00 AM Oct 16 2007
Spins: 10
MENU
PAYS
MORE
JOINING TOURNAMENT...
GOOD LUCK!
PRESS SPIN BUTTON
ON MAIN GAME TO BEGIN
RANK PLAYER SCORE
YOUR SCORE
SPINS LEFT 9
PAYS
RANK PLAYER BEST SCORE PRIZE
1 Victoria_I 11,838 $ 261.58
2 Rukku_R_99901 11,589 $ 156.95
3 Gwyn_R_44241 10,779 $ 104.63
4 Brenda_M_35931 10,008 $ 0
SCROLL
CONTINUE
Display places 5 through 8.
Returns to previous screen
RANK PLAYER SCORE
1 Victoria_I 11,838
2 Rukku_R_99901 11,589
5 Dude_S_69541 6,331
6 Mary_H_65431 195
YOUR SCORE 195
SPINS LEFT 9
PAYS
Continue to Game Over

FIG. 46

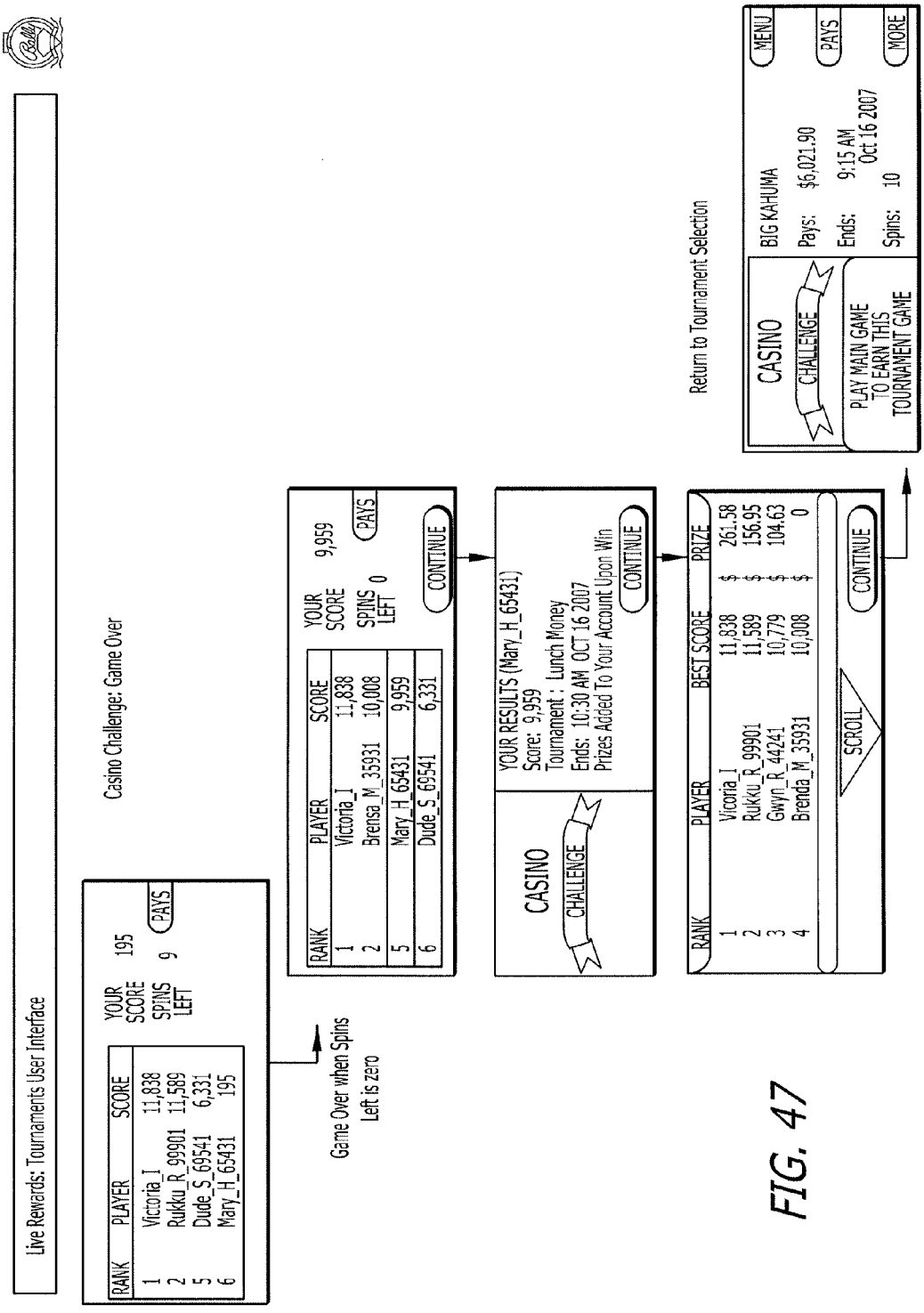

Live Rewards: Tournaments User Interface
Casino Challenge: Game Over
RANK PLAYER SCORE
1 Victoria_I 11,838
2 Rukku_R_99901 11,589
5 Dude_S_69541 6,331
6 Mary_H_65431 195
YOUR SCORE 195
SPINS LEFT 9
PAYS
Game Over when Spins Left is zero
RANK PLAYER SCORE
1 Victoria_I 11,838
2 Brensa_M_35931 10,008
5 Mary_H_65431 9,959
6 Dude_S_69541 6,331
YOUR SCORE 9,959
SPINS LEFT 0
PAYS
CONTINUE
CASINO
CHALLENGE
YOUR RESULTS (Mary_H_65431)
Score: 9,959
Tournament : Lunch Money
Ends: 10:30 AM OCT 16 2007
Prizes Added To Your Account Upon Win
CONTINUE
RANK PLAYER BEST SCORE PRIZE
1 Victoria_I 11,838 $ 261.58
2 Rukku_R_99901 11,589 $ 156.95
3 Gwyn_R_44241 10,779 $ 104.63
4 Brenda_M_35931 10,008 $ 0
SCROLL
CONTINUE
Return to Tournament Selection
CASINO
CHALLENGE
PLAY MAIN GAME TO EARN THIS TOURNAMENT GAME
BIG KAHUNA
Pays: $6,021.90
Ends: 9:15 AM Oct 16 2007
Spins: 10
MENU
PAYS
MORE

FIG. 47

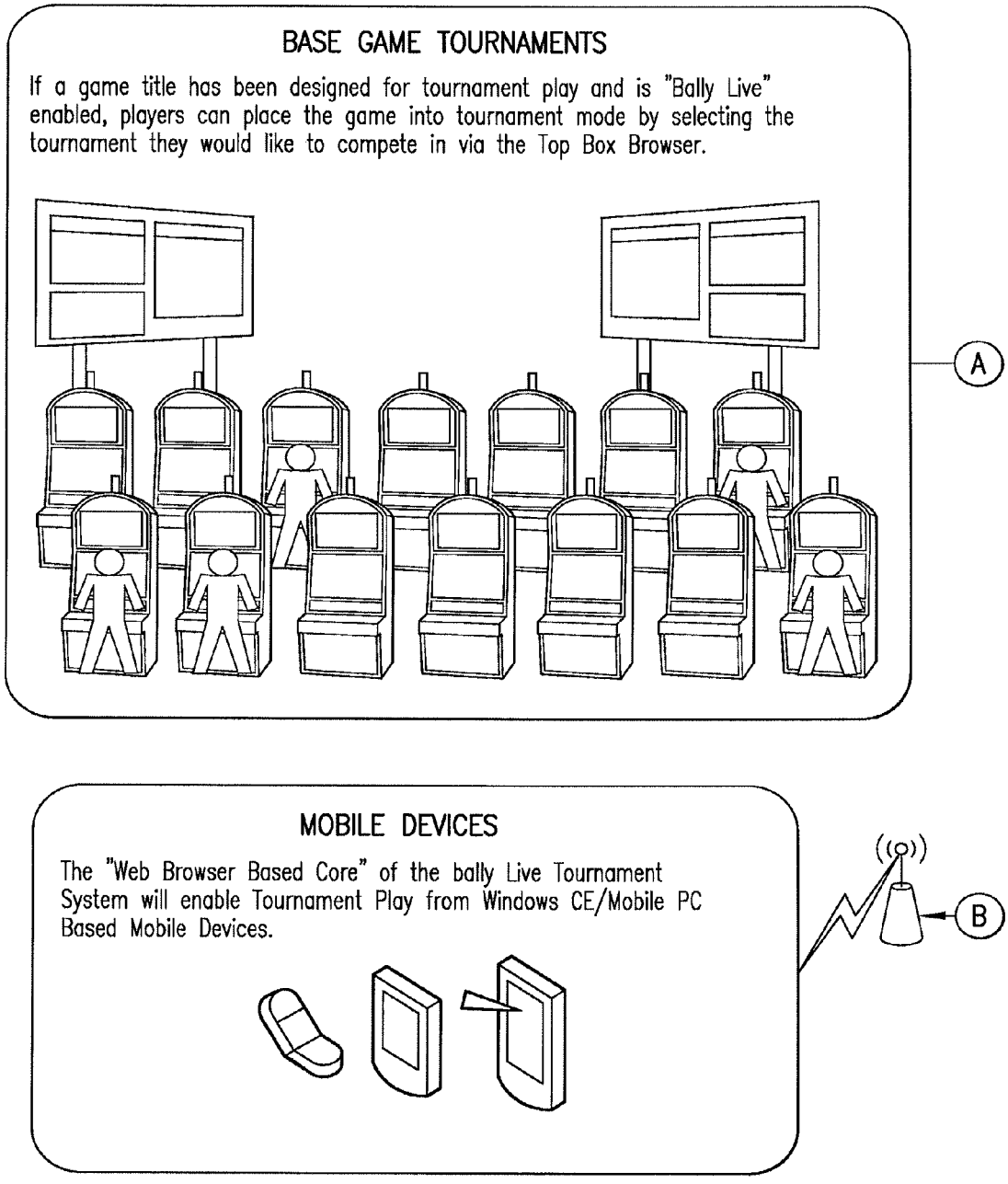

BASE GAME TOURNAMENTS
If a game title has been designed for tournament play and is "Bally Live" enabled, players can place the game into tournament mode by selecting the tournament they would like to compete in via the Top Box Browser.
A
MOBILE DEVICES
The "Web Browser Based Core" of the bally Live Tournament System will enable Tournament Play from Windows CE/Mobile PC Based Mobile Devices.
B

FIG.48A

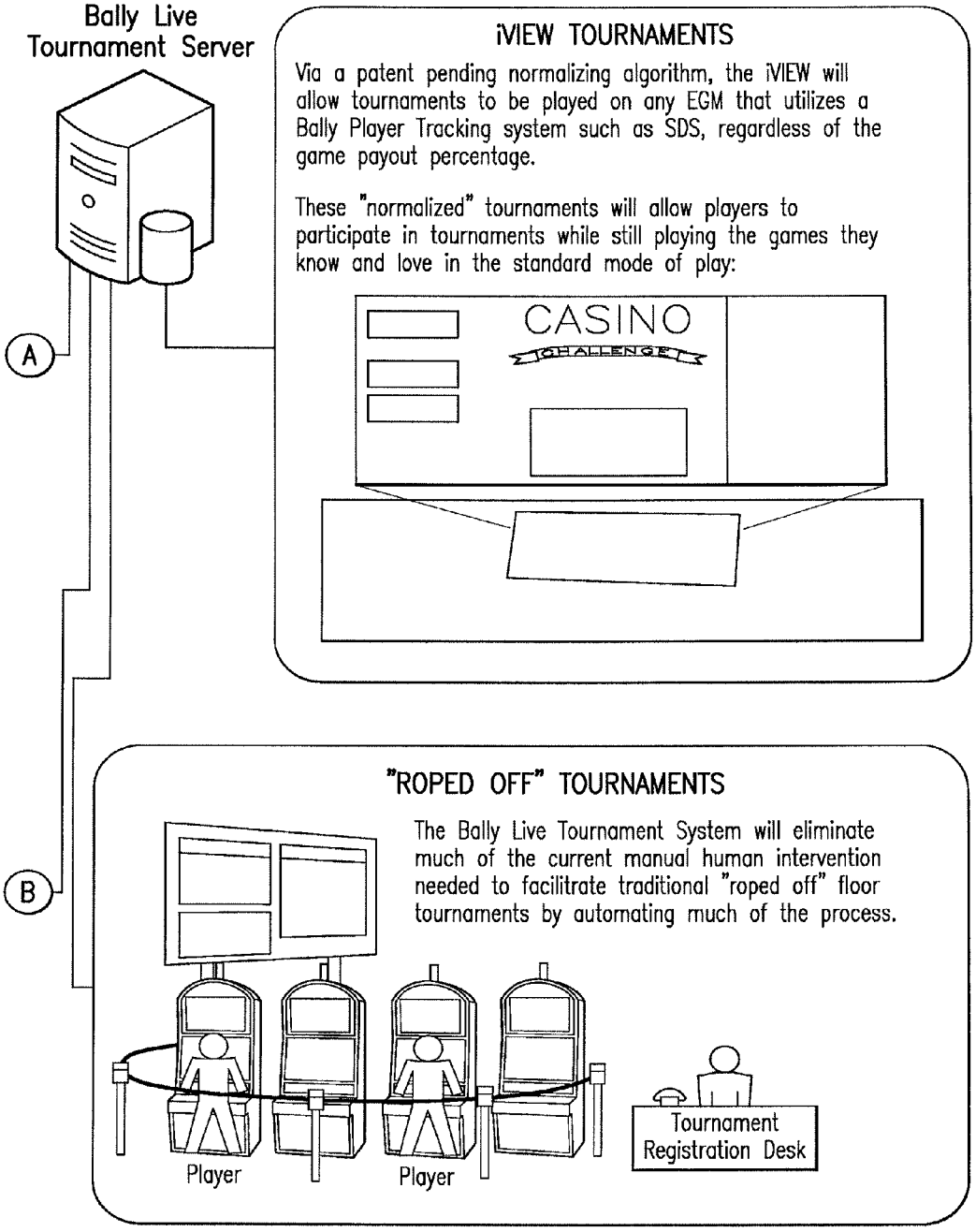

Bally Live
Tournament Server
A
B
iVIEW TOURNAMENTS
Via a patent pending normalizing algorithm, the iVIEW will allow tournaments to be played on any EGM that utilizes a Bally Player Tracking system such as SDS, regardless of the game payout percentage.
These "normalized" tournaments will allow players to participate in tournaments while still playing the games they know and love in the standard mode of play:
CASINO
CHALLENGE
"ROPED OFF" TOURNAMENTS
The Bally Live Tournament System will eliminate much of the current manual human intervention needed to facilitrate traditional "roped off" floor tournaments by automating much of the process.
Player
Player
Tournament
Registration Desk

FIG.48B

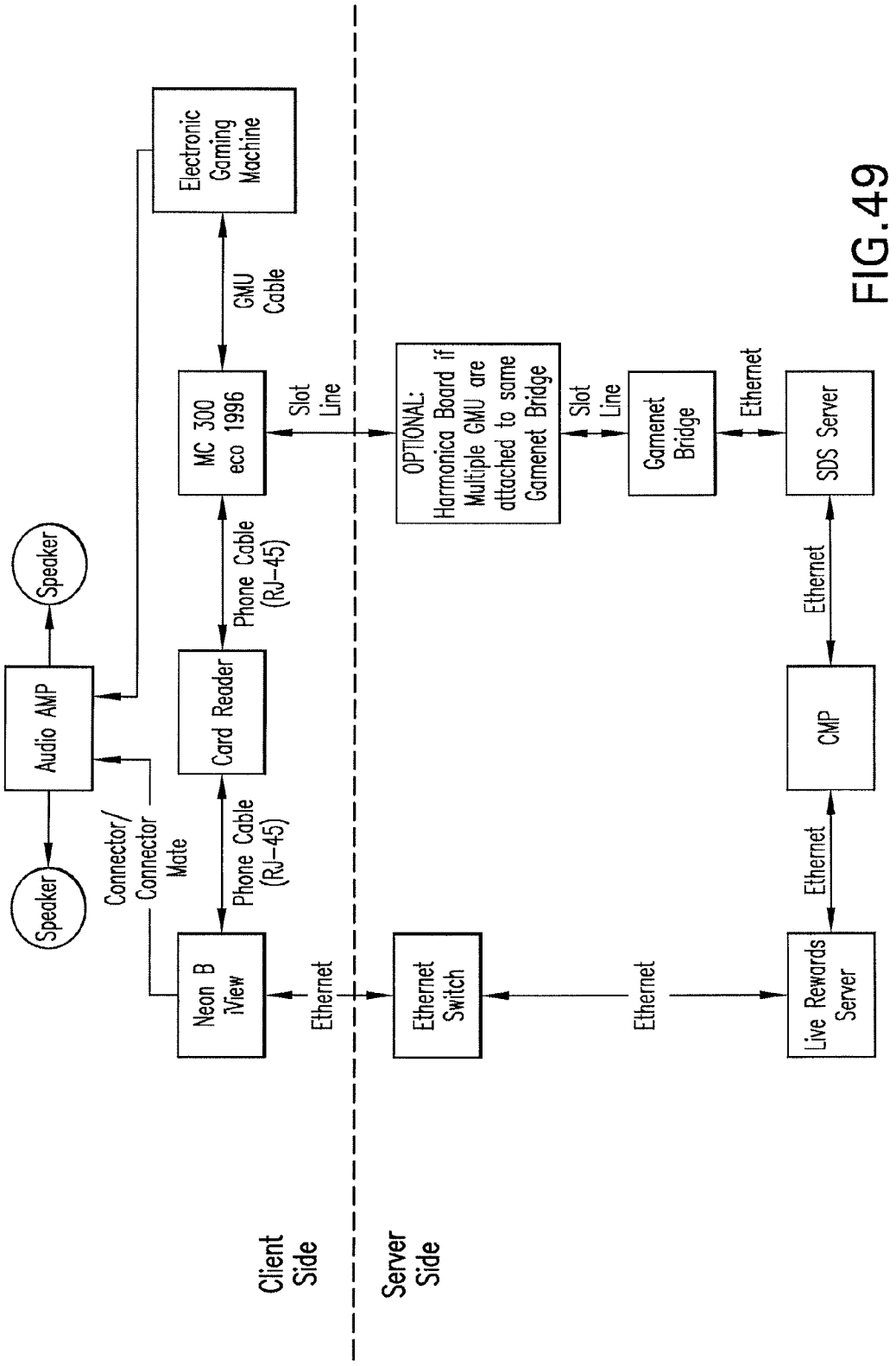

Electronic Gaming Machine
GMU Cable
MC 300 eco 1996
Slot Line
OPTIONAL: Harmonica Board if Multiple GMU are attached to same Gamenet Bridge
Slot Line
Gamenet Bridge
Ethernet
SDS Server
Speaker
Audio AMP
Speaker
Phone Cable (RJ-45)
Card Reader
Ethernet
CMP
Connector/ Connector Mate
Phone Cable (RJ-45)
Neon B iView
Ethernet
Ethernet Switch
Ethernet
Ethernet
Live Rewards Server
Client Side
Server Side

FIG.49

Tournament Parts

Basic Specs for how the tournament runs

- Limited Entry/Time Based/Sprint
- # of entries per player
- Prize list (fixed or Progressive)
- Can a player win once or more

Score Table

Rank	Name	Score
1)	Bryan	1120
2)	Bob	1000
3)	Jeff	976
N)	Player X	763

Other Tournament Actions

This list can grow over time as we add new rules.
For each of the actions in this list there will be logic for if/when/what the rule does. Some of these rules will run as each score is posted, some will run only at the end of this tournament.

1) Add player to an invite list on another tournament
2) Change player club status
3) Change player Pyramid rank

Rules for other Tournaments posting to this Tournament

There could be 0 to N rules in the list. The incoming score/player must pass all the requirements for the score to be posted. Each rule will need it's own pass/fail logic.

1) Player on Include list
2) Player Club Level
3) Score value
4) Player has already posted a score

List of Other Tournaments to post the Score To

Each entry in the list will have the following field associated with it:

Fields	Definition
Orig Stid	The STID of the tournament sending a score
Dest Stid	The STID of the tournament where the score should be posted (sometimes will be a TID)
Add/create Score	Tells the DEST STID whether the score that is being posted adds to a score already posted on the destination STID or create/replace an existing score
Processing time I/E	Does the player's score post immediately or when this tournament ends
Lowest rank to post	The lowest rank in the score list to post to the DEST Tourn

FIG.50A

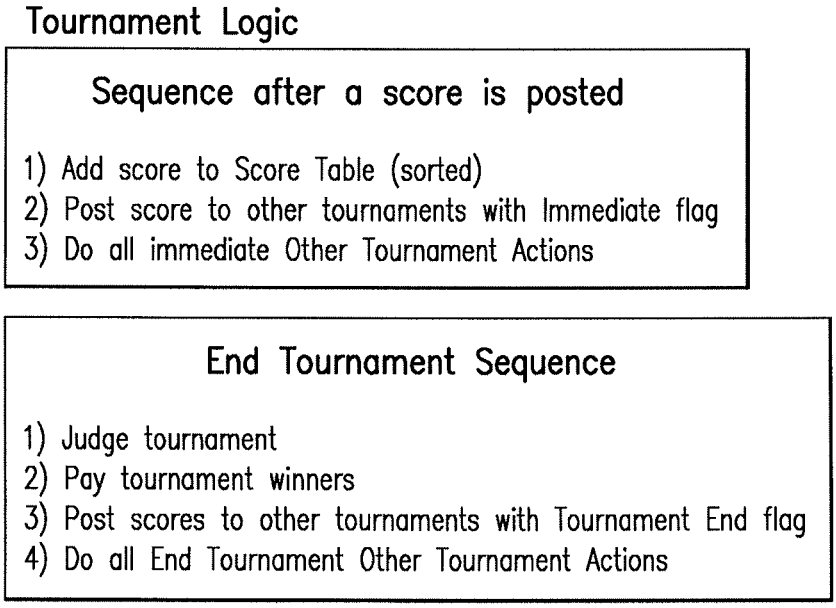

Tournament Logic
Sequence after a score is posted
1) Add score to Score Table (sorted)
2) Post score to other tournaments with Immediate flag
3) Do all immediate Other Tournament Actions
End Tournament Sequence
1) Judge tournament
2) Pay tournament winners
3) Post scores to other tournaments with Tournament End flag
4) Do all End Tournament Other Tournament Actions

FIG.50B

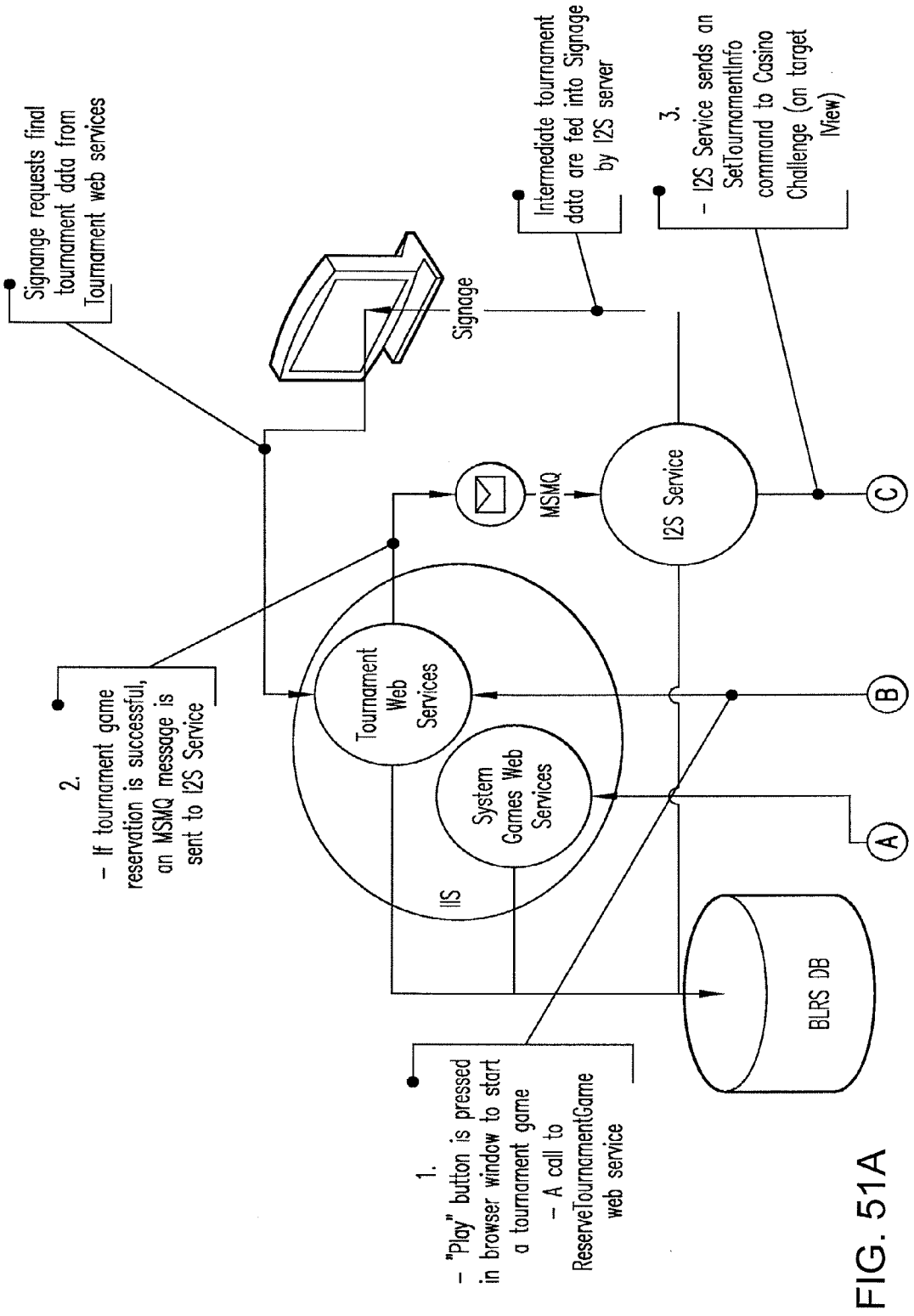

Signange requests final tournament data from Tournament web services
Intermediate tournament data are fed into Signage by I2S server
3.
- I2S Service sends an SetTournamentInfo command to Casino Challenge (on target View)
Signage
MSMQ
I2S Service
C
2.
- If tournament game reservation is successful, an MSMQ message is sent to I2S Service
Tournament Web Services
System Games Web Services
IIS
B
A
BLRS DB
1.
- "Play" button is pressed in browser window to start a tournament game
- A call to ReserveTournamentGame web service

FIG. 51A

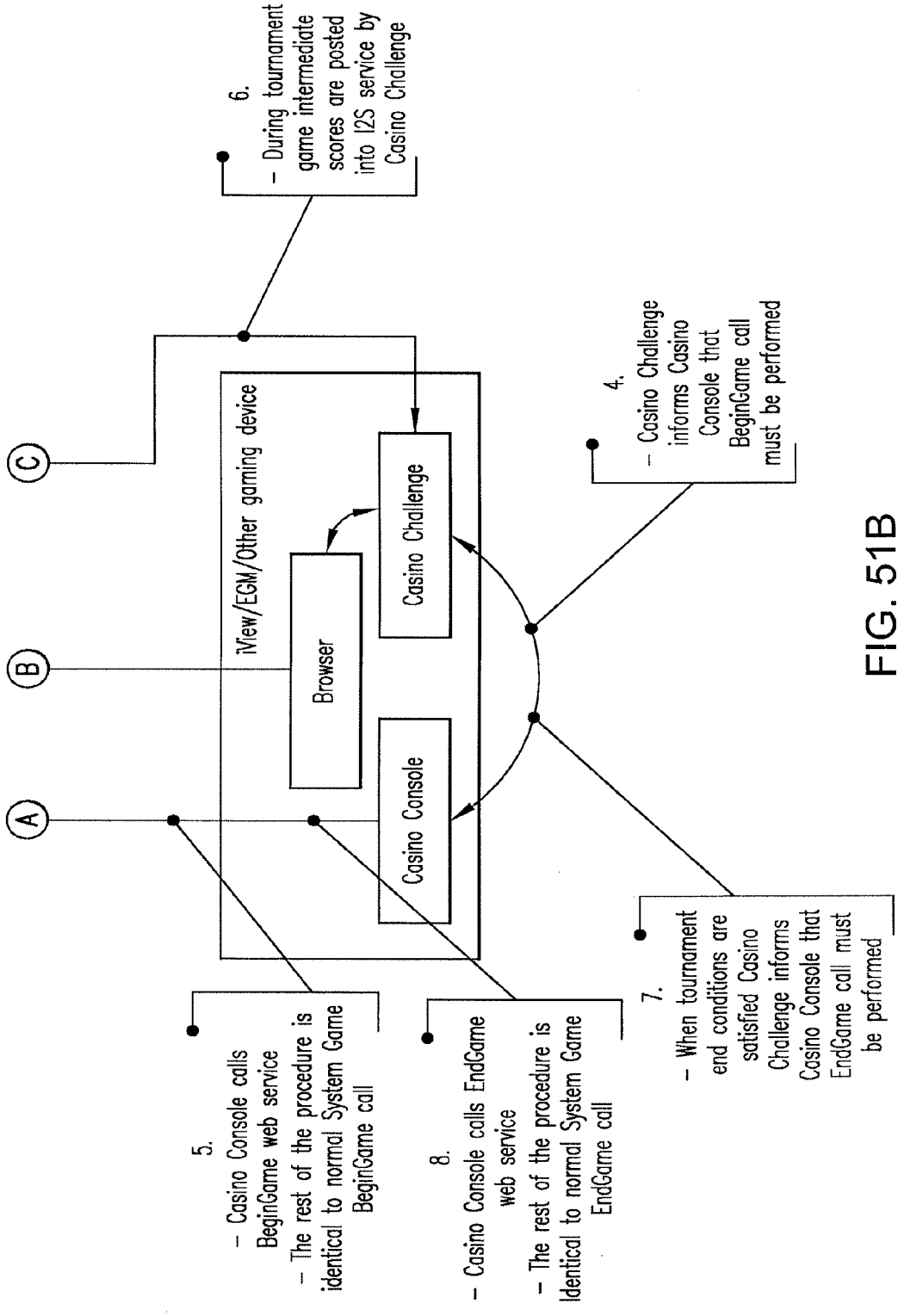

6.
– During tournament game intermediate scores are posted into I2S service by Casino Challenge
C
iView/EGM/Other gaming device
Browser
Casino Challenge
4.
– Casino Challenge informs Casino Console that BeginGame call must be performed
B
A
Casino Console
5.
– Casino Console calls BeginGame web service
– The rest of the procedure is identical to normal System Game BeginGame call
8.
– Casino Console calls EndGame web service
– The rest of the procedure is identical to normal System Game EndGame call
7.
– When tournament end conditions are satisfied Casino Challenge informs Casino Console that EndGame call must be performed

FIG. 51B

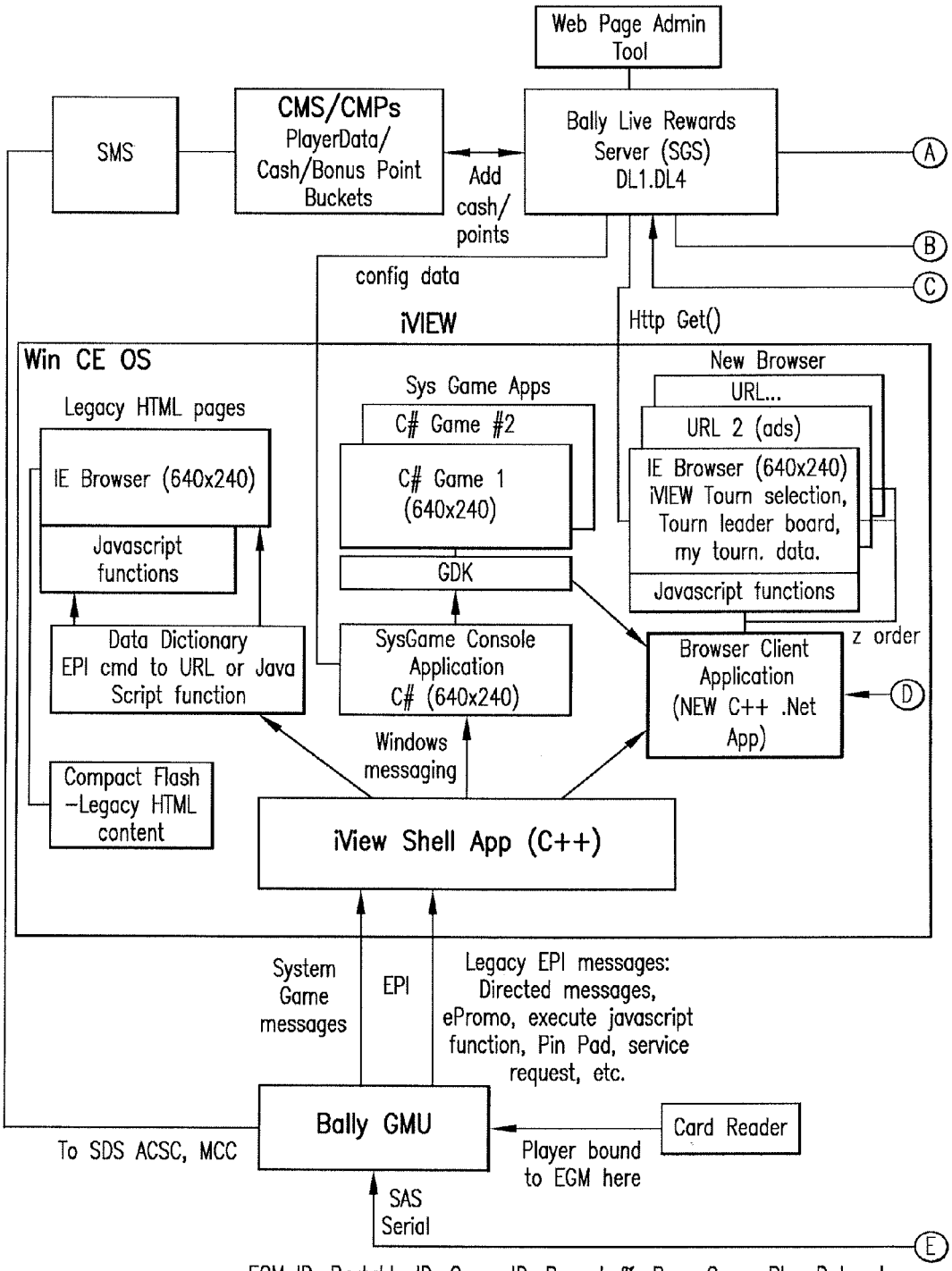
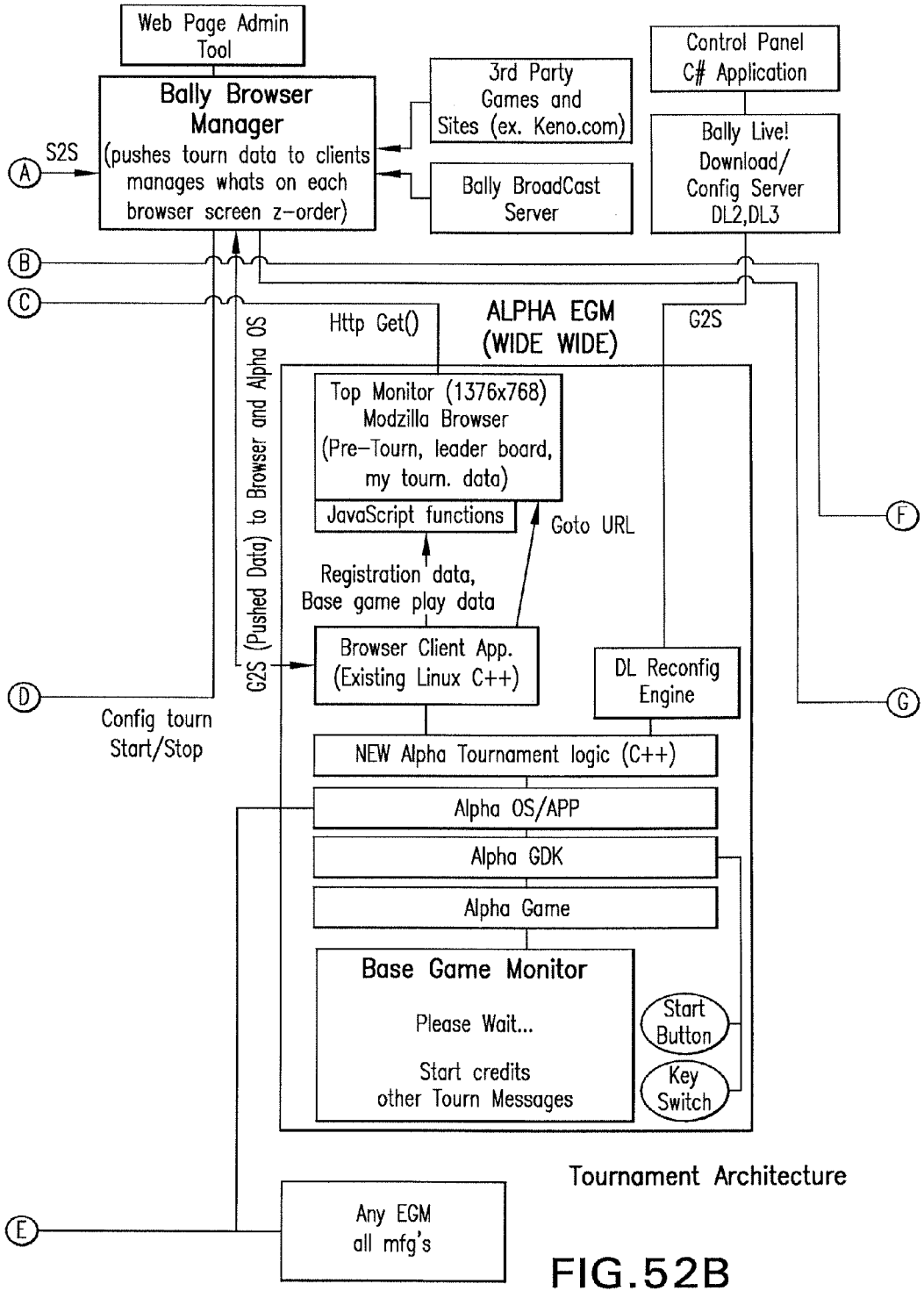

Web Page Admin Tool
SMS
CMS/CMPs PlayerData/ Cash/Bonus Point Buckets
Add cash/ points
Bally Live Rewards Server (SGS) DL1.DL4
A
B
C
config data
iVIEW
Http Get()
Win CE OS
Legacy HTML pages
IE Browser (640x240)
Javascript functions
Data Dictionary EPI cmd to URL or Java Script function
Sys Game Apps
C# Game #2
C# Game 1 (640x240)
GDK
SysGame Console Application C# (640x240)
New Browser
URL...
URL 2 (ads)
IE Browser (640x240) iVIEW Tourn selection, Tourn leader board, my tourn. data.
Javascript functions
z order
Browser Client Application (NEW C++ .Net App)
D
Windows messaging
Compact Flash -Legacy HTML content
iView Shell App (C++)
System Game messages
EPI
Legacy EPI messages: Directed messages, ePromo, execute javascript function, Pin Pad, service request, etc.
Bally GMU
Card Reader
To SDS ACSC, MCC
Player bound to EGM here
SAS Serial
E
EGM ID, Paytable ID, Game ID, Payout %, Base Game Play Data etc...

FIG.52A



Tournament Architecture

FIG.52B

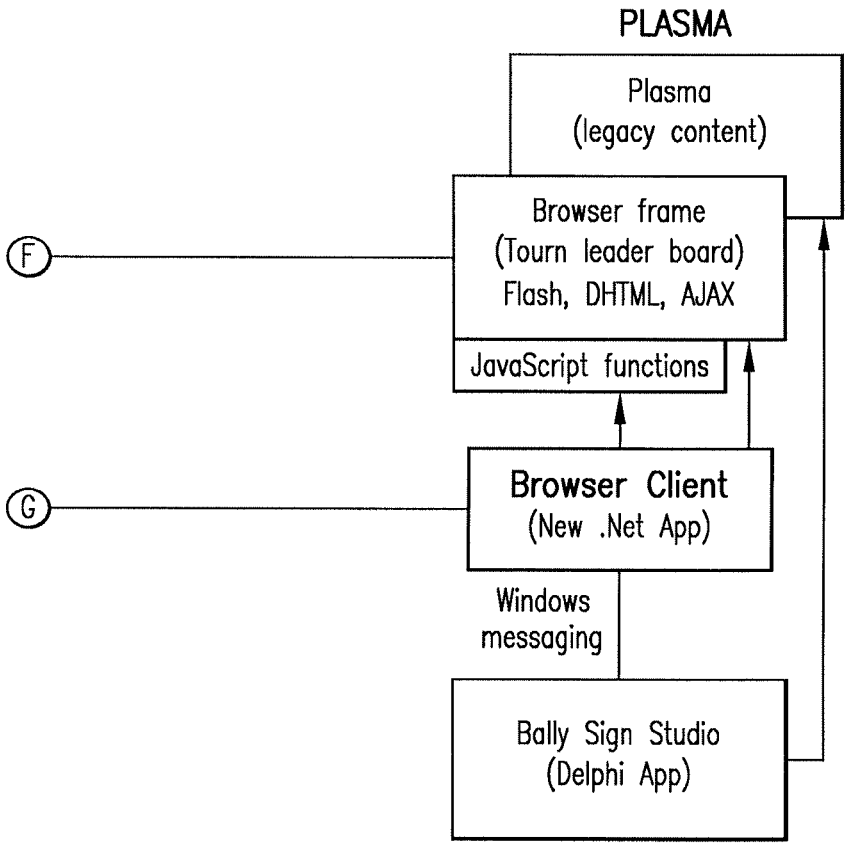

PLASMA
Plasma
(legacy content)
Browser frame
(Tourn leader board)
Flash, DHTML, AJAX
JavaScript functions
F
G
Browser Client
(New .Net App)
Windows
messaging
Bally Sign Studio
(Delphi App)

FIG.52C

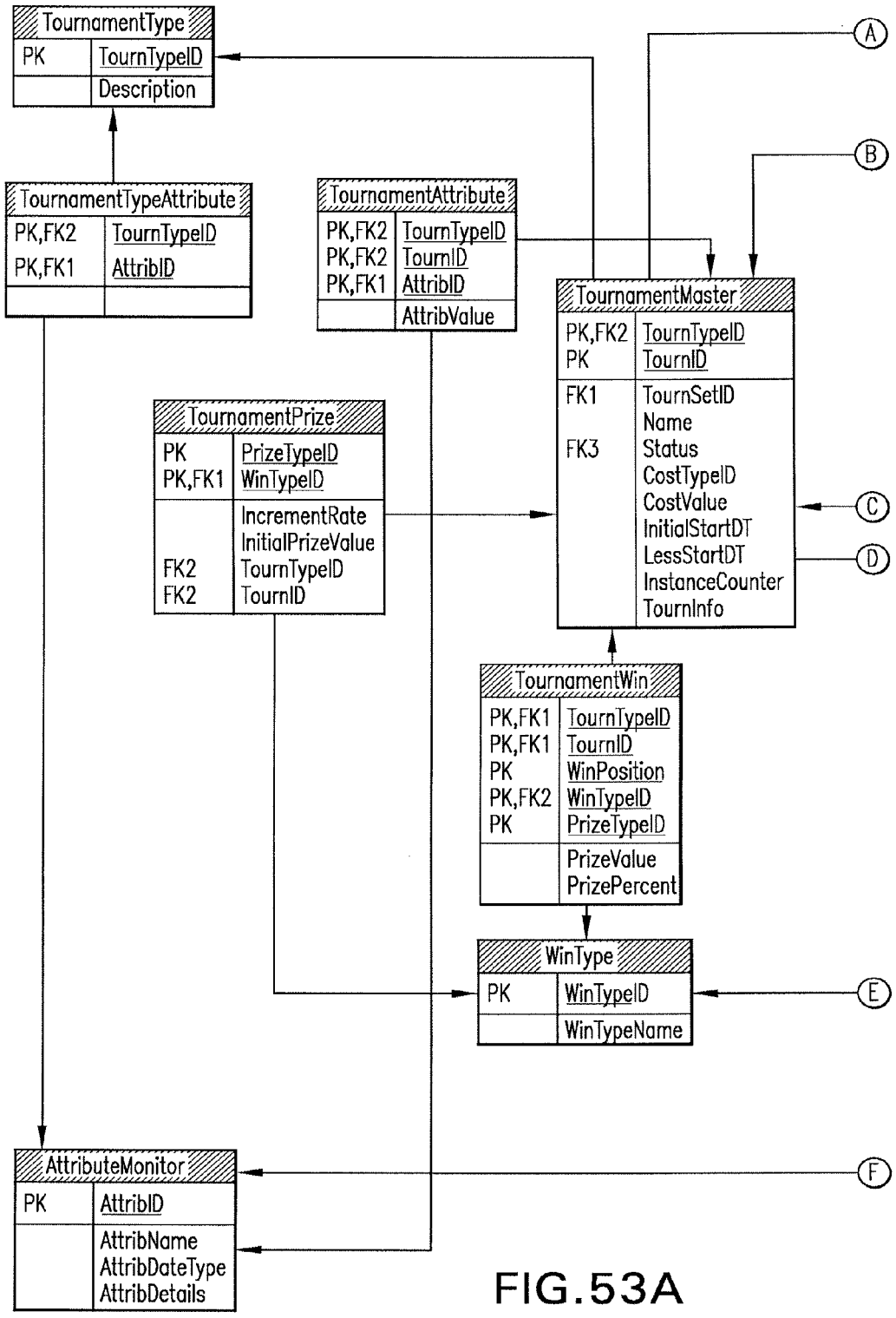

TournamentType
PK TournTypeID
Description
TournamentTypeAttribute
PK,FK2 TournTypeID
PK,FK1 AttribID
TournamentAttribute
PK,FK2 TournTypeID
PK,FK2 TournID
PK,FK1 AttribID
AttribValue
TournamentMaster
PK,FK2 TournTypeID
PK TournID
FK1 TournSetID
Name
FK3 Status
CostTypeID
CostValue
InitialStartDT
LessStartDT
InstanceCounter
TournInfo
TournamentPrize
PK PrizeTypeID
PK,FK1 WinTypeID
IncrementRate
InitialPrizeValue
FK2 TournTypeID
FK2 TournID
TournamentWin
PK,FK1 TournTypeID
PK,FK1 TournID
PK WinPosition
PK,FK2 WinTypeID
PK PrizeTypeID
PrizeValue
PrizePercent
WinType
PK WinTypeID
WinTypeName
AttributeMonitor
PK AttribID
AttribName
AttribDateType
AttribDetails
A
B
C
D
E
F

FIG.53A

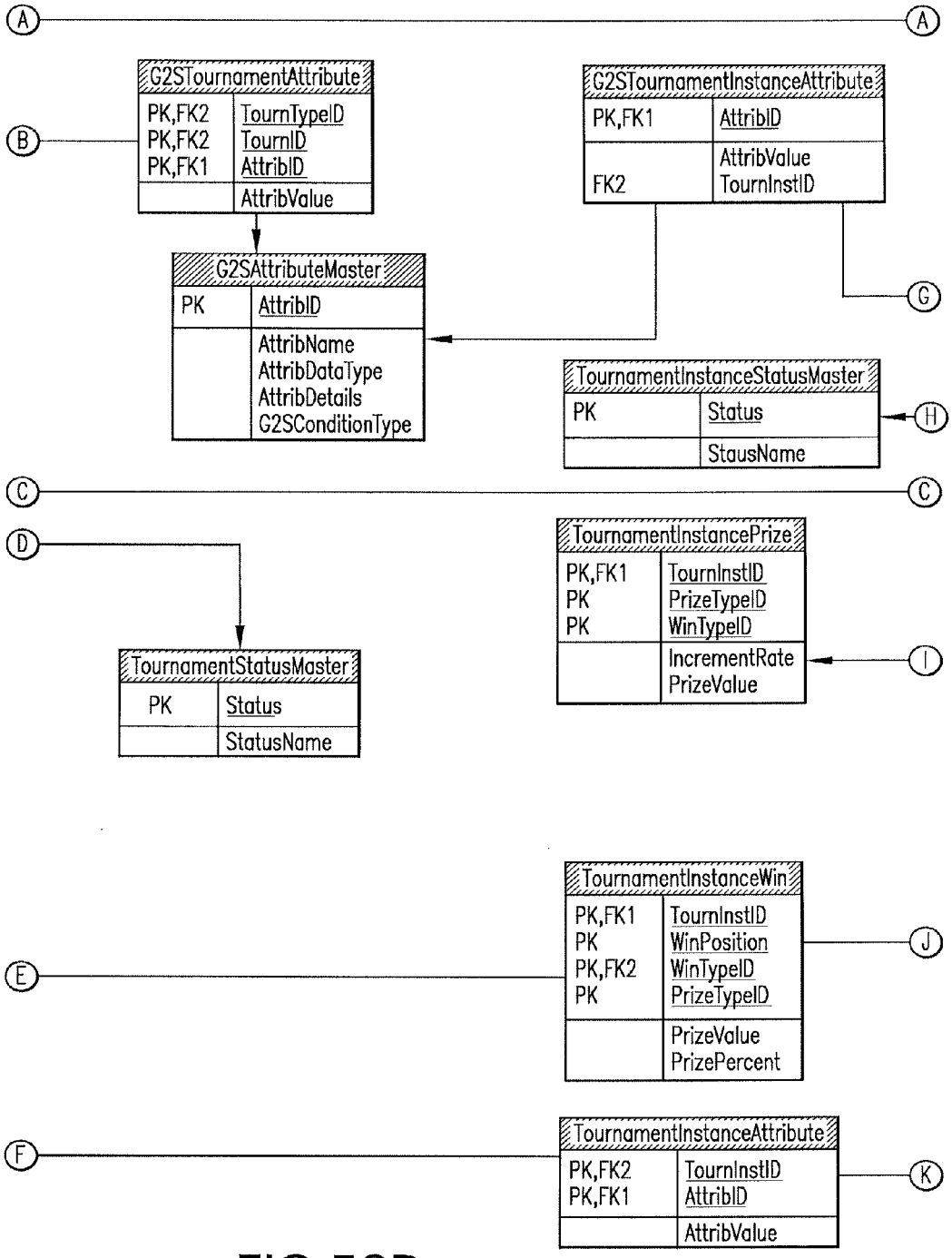

A
A
G2STournamentAttribute
PK,FK2 TournTypeID
PK,FK2 TournID
PK,FK1 AttribID
AttribValue
B
G2STournamentInstanceAttribute
PK,FK1 AttribID
AttribValue
FK2 TournInstID
G
G2SAttributeMaster
PK AttribID
AttribName
AttribDataType
AttribDetails
G2SConditionType
TournamentInstanceStatusMaster
PK Status
StausName
H
C
C
D
TournamentInstancePrize
PK,FK1 TournInstID
PK PrizeTypeID
PK WinTypeID
IncrementRate
PrizeValue
I
TournamentStatusMaster
PK Status
StatusName
TournamentInstanceWin
PK,FK1 TournInstID
PK WinPosition
PK,FK2 WinTypeID
PK PrizeTypeID
PrizeValue
PrizePercent
J
E
F
TournamentInstanceAttribute
PK,FK2 TournInstID
PK,FK1 AttribID
AttribValue
K

FIG.53B

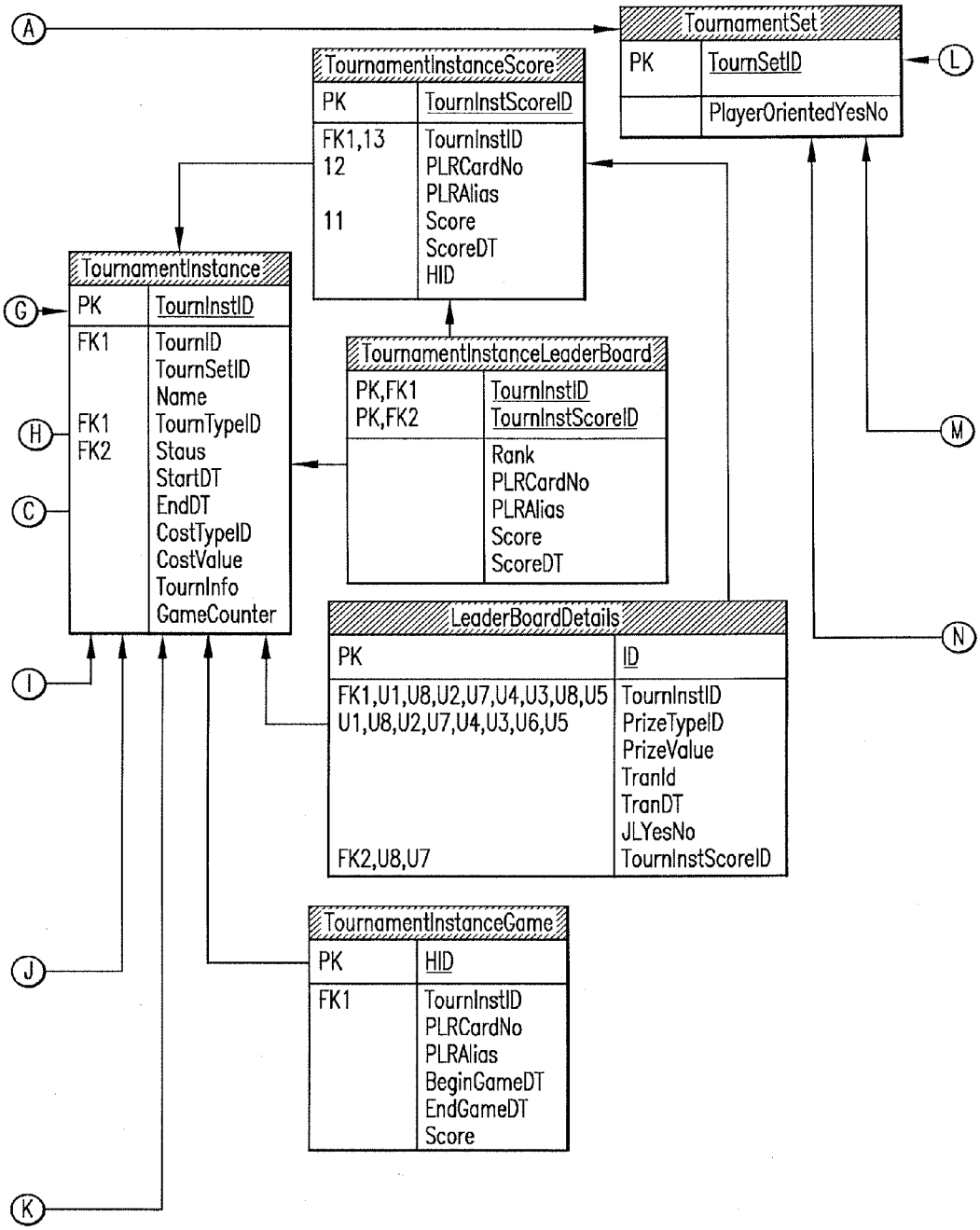

A
TournamentSet
PK
TournSetID
PlayerOrientedYesNo
L
TournamentInstanceScore
PK
TournInstScoreID
FK1,13
12
11
TournInstID
PLRCardNo
PLRAlias
Score
ScoreDT
HID
TournamentInstance
G
PK
TournInstID
FK1
TournID
TournSetID
Name
H
FK1
FK2
TournTypeID
Staus
C
StartDT
EndDT
CostTypeID
CostValue
TournInfo
GameCounter
TournamentInstanceLeaderBoard
PK,FK1
PK,FK2
TournInstID
TournInstScoreID
Rank
PLRCardNo
PLRAlias
Score
ScoreDT
M
N
LeaderBoardDetails
PK
ID
FK1,U1,U8,U2,U7,U4,U3,U8,U5
U1,U8,U2,U7,U4,U3,U6,U5
FK2,U8,U7
TournInstID
PrizeTypeID
PrizeValue
TranId
TranDT
JLYesNo
TournInstScoreID
I
J
K
TournamentInstanceGame
PK
HID
FK1
TournInstID
PLRCardNo
PLRAlias
BeginGameDT
EndGameDT
Score

FIG.53C

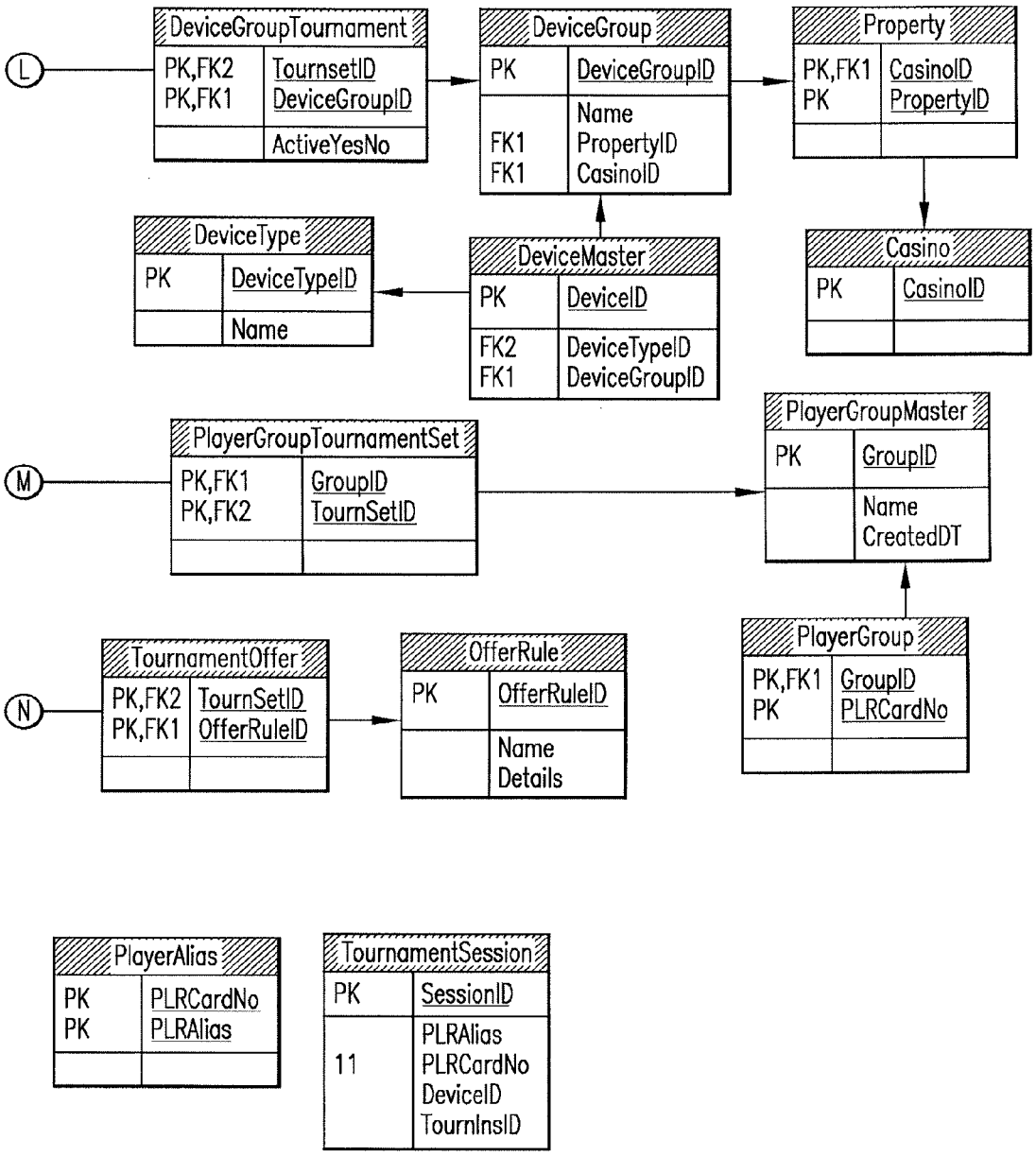

L
DeviceGroupTournament
PK,FK2 TournsetID
PK,FK1 DeviceGroupID
ActiveYesNo
DeviceGroup
PK DeviceGroupID
Name
FK1 PropertyID
FK1 CasinoID
Property
PK,FK1 CasinoID
PK PropertyID
DeviceType
PK DeviceTypeID
Name
DeviceMaster
PK DeviceID
FK2 DeviceTypeID
FK1 DeviceGroupID
Casino
PK CasinoID
M
PlayerGroupTournamentSet
PK,FK1 GroupID
PK,FK2 TournSetID
PlayerGroupMaster
PK GroupID
Name
CreatedDT
N
TournamentOffer
PK,FK2 TournSetID
PK,FK1 OfferRuleID
OfferRule
PK OfferRuleID
Name
Details
PlayerGroup
PK,FK1 GroupID
PK PLRCardNo
PlayerAlias
PK PLRCardNo
PK PLRAlias
TournamentSession
PK SessionID
11 PLRAlias
PLRCardNo
DeviceID
TournInsID

FIG.53D

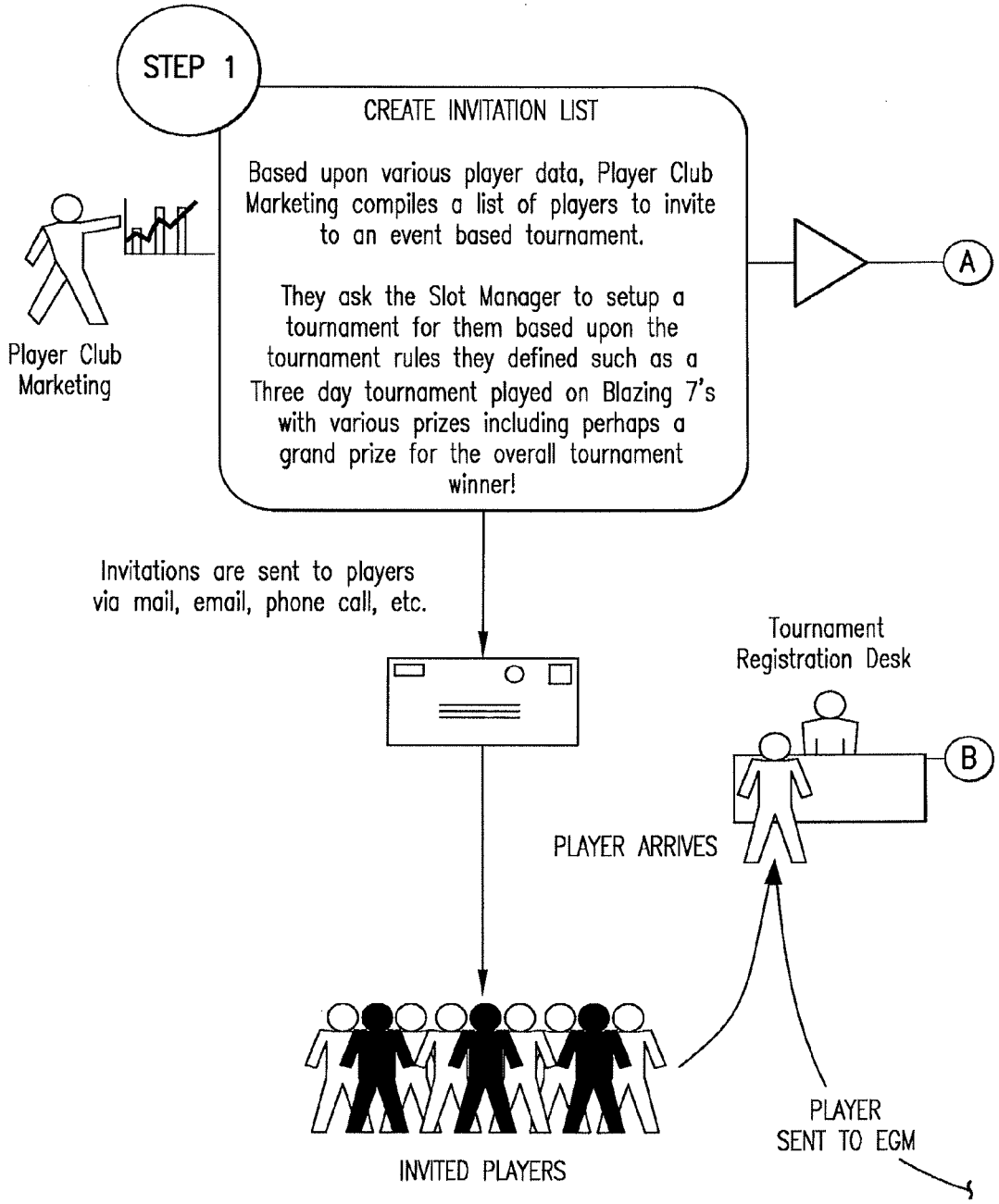

STEP 1
CREATE INVITATION LIST
Based upon various player data, Player Club Marketing compiles a list of players to invite to an event based tournament.
They ask the Slot Manager to setup a tournament for them based upon the tournament rules they defined such as a Three day tournament played on Blazing 7's with various prizes including perhaps a grand prize for the overall tournament winner!
A
Player Club Marketing
Invitations are sent to players via mail, email, phone call, etc.
Tournament Registration Desk
B
PLAYER ARRIVES
PLAYER SENT TO EGM
INVITED PLAYERS

FIG.54A

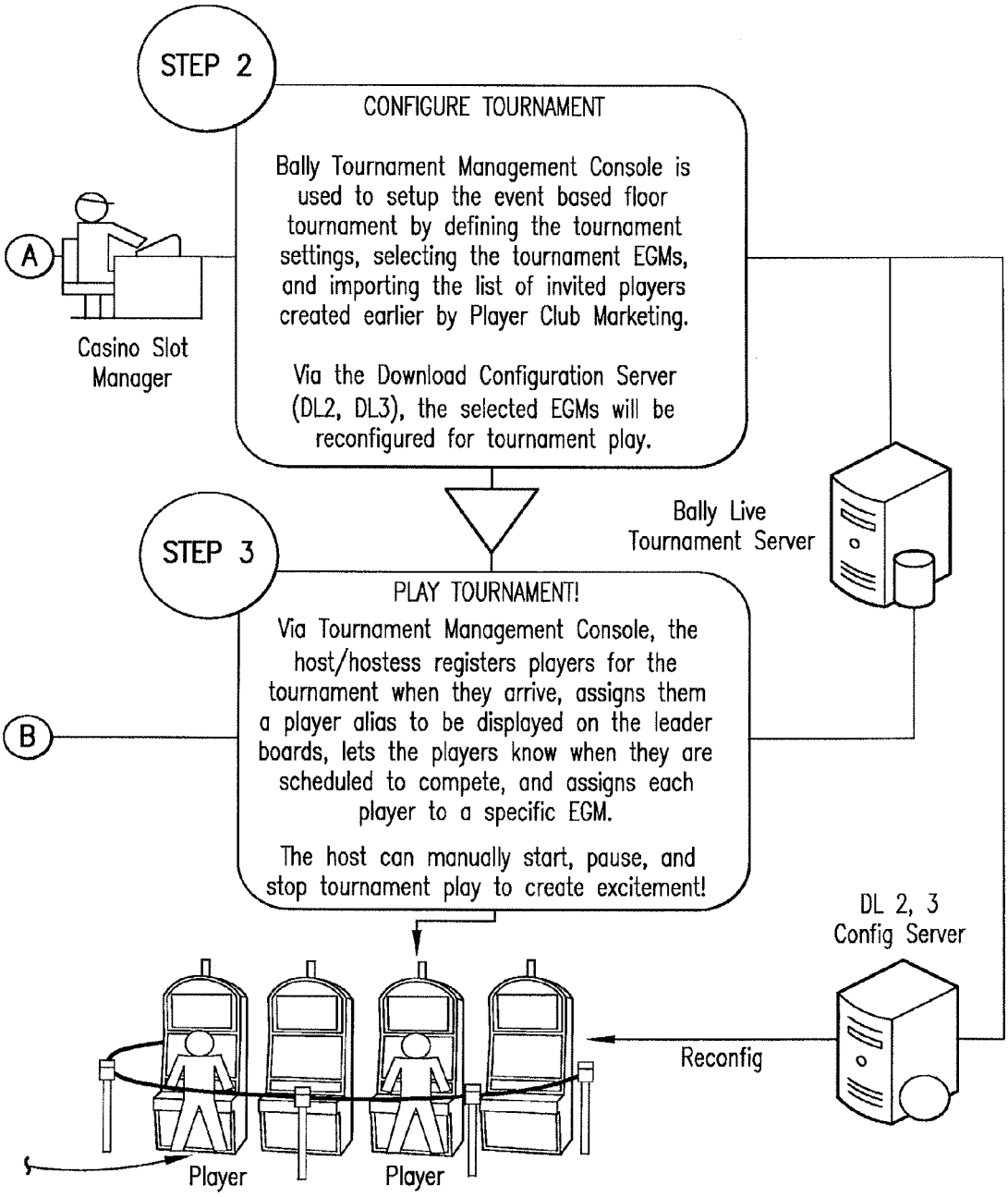

STEP 2
CONFIGURE TOURNAMENT
Bally Tournament Management Console is used to setup the event based floor tournament by defining the tournament settings, selecting the tournament EGMs, and importing the list of invited players created earlier by Player Club Marketing.
Via the Download Configuration Server (DL2, DL3), the selected EGMs will be reconfigured for tournament play.
A
Casino Slot Manager
Bally Live Tournament Server
STEP 3
PLAY TOURNAMENT!
Via Tournament Management Console, the host/hostess registers players for the tournament when they arrive, assigns them a player alias to be displayed on the leader boards, lets the players know when they are scheduled to compete, and assigns each player to a specific EGM.
The host can manually start, pause, and stop tournament play to create excitement!
B
DL 2, 3 Config Server
Reconfig
Player
Player

FIG.54B

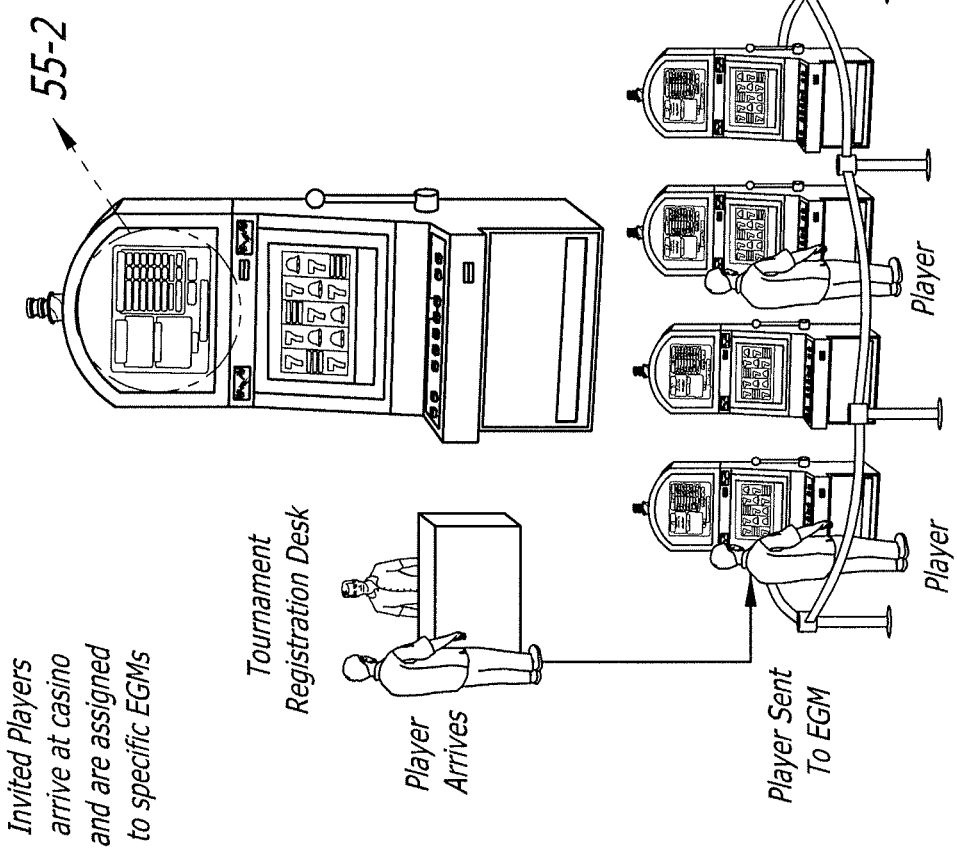

55-2
Invited Players arrive at casino and are assigned to specific EGMs
Tournament Registration Desk
Player Arrives
Player Sent To EGM
Player
Player

FIG. 55-1

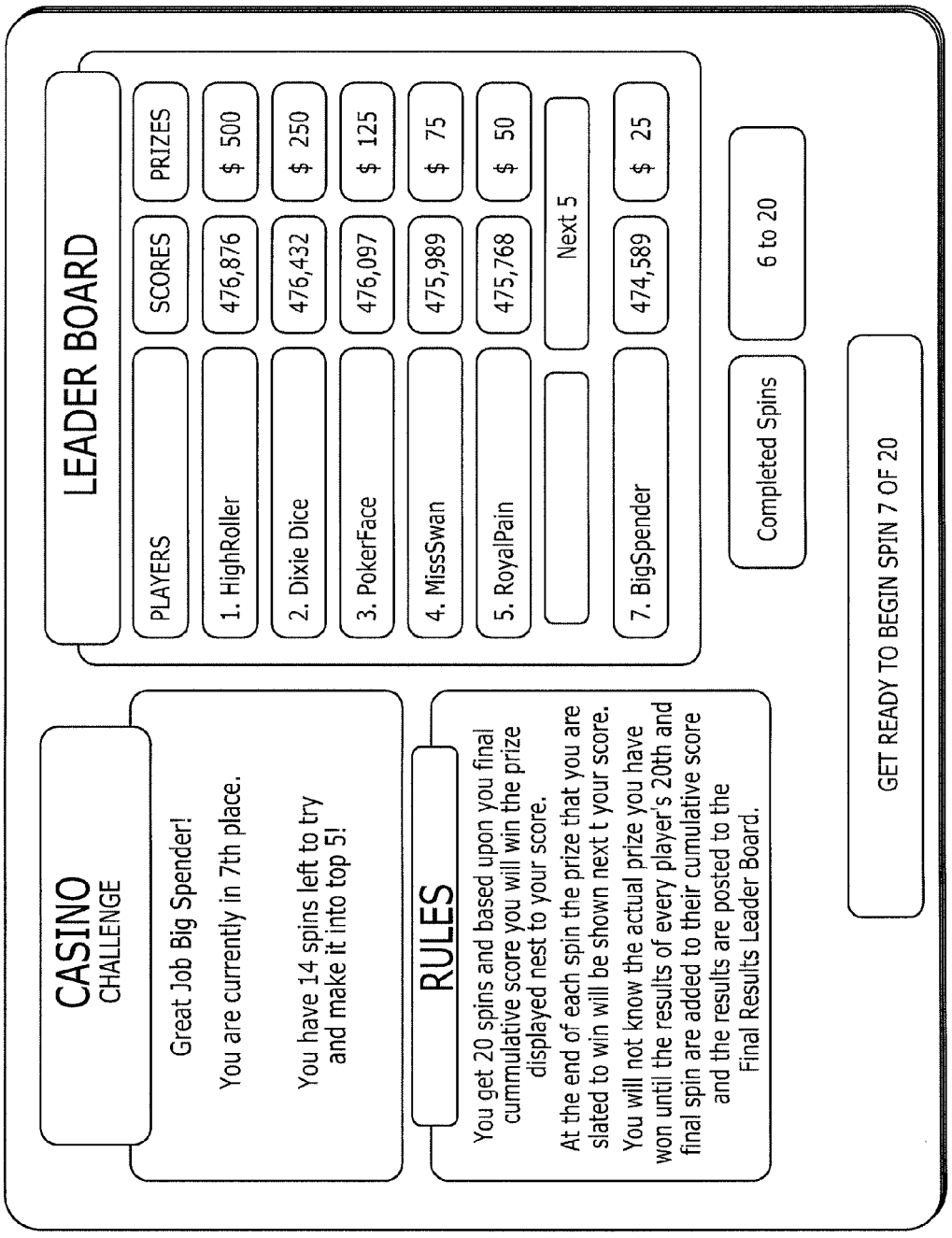

CASINO
CHALLENGE
Great Job Big Spender!
You are currently in 7th place.
You have 14 spins left to try and make it into top 5!
RULES
You get 20 spins and based upon you final cummulative score you will win the prize displayed nest to your score.
At the end of each spin the prize that you are slated to win will be shown next t your score.
You will not know the actual prize you have won until the results of every player's 20th and final spin are added to their cumulative score and the results are posted to the Final Results Leader Board.
LEADER BOARD
PLAYERS
SCORES
PRIZES
1. HighRoller
476,876
$ 500
2. Dixie Dice
476,432
$ 250
3. PokerFace
476,097
$ 125
4. MissSwan
475,989
$ 75
5. RoyalPain
475,768
$ 50
Next 5
7. BigSpender
474,589
$ 25
Completed Spins
6 to 20
GET READY TO BEGIN SPIN 7 OF 20

FIG. 55-2

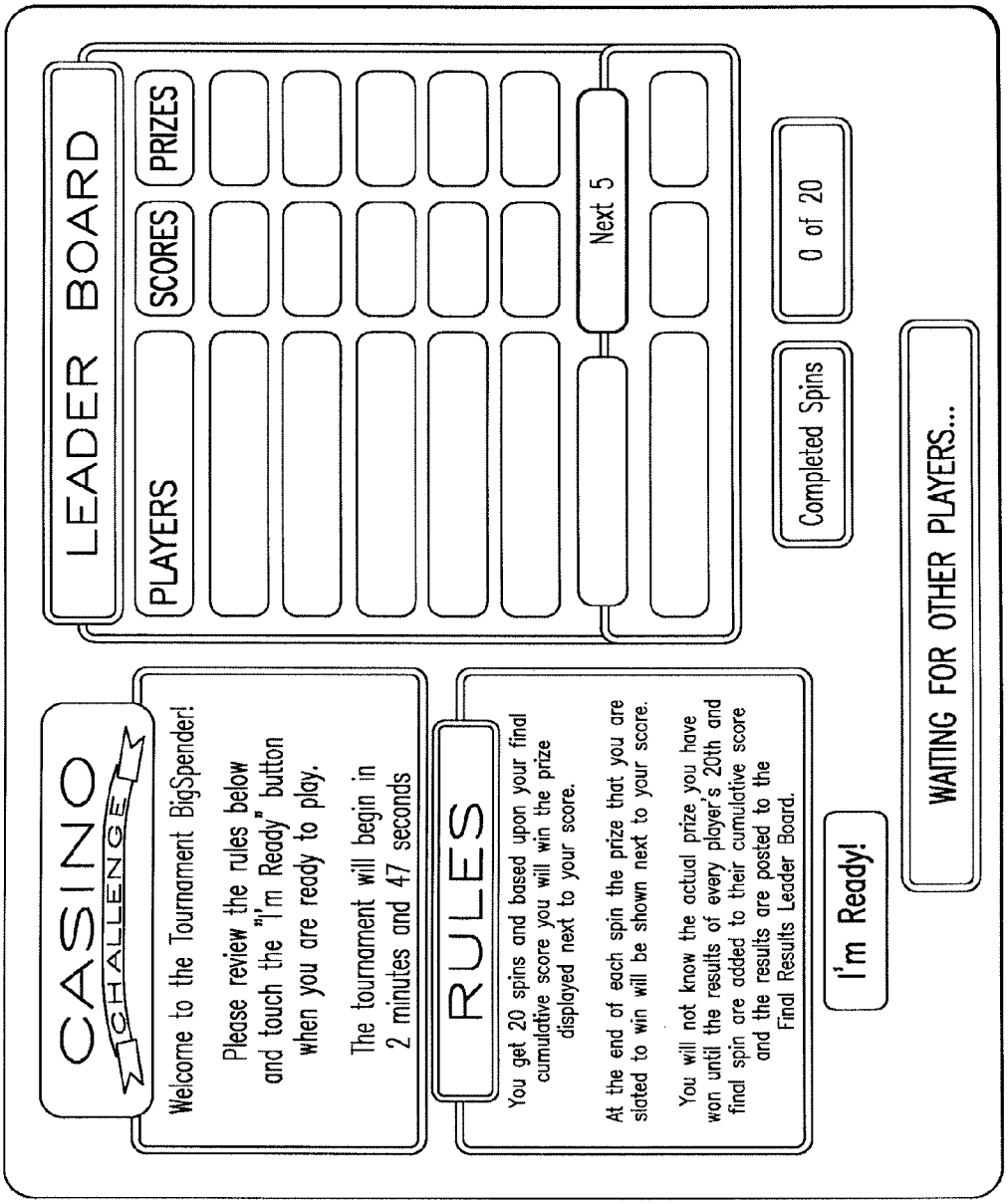


FIG.56

STEP 2

Player has been assigned to an EGM and is waiting for other players to join the tournament so they can all start together via a synchronized start initiated by the Tournament Server

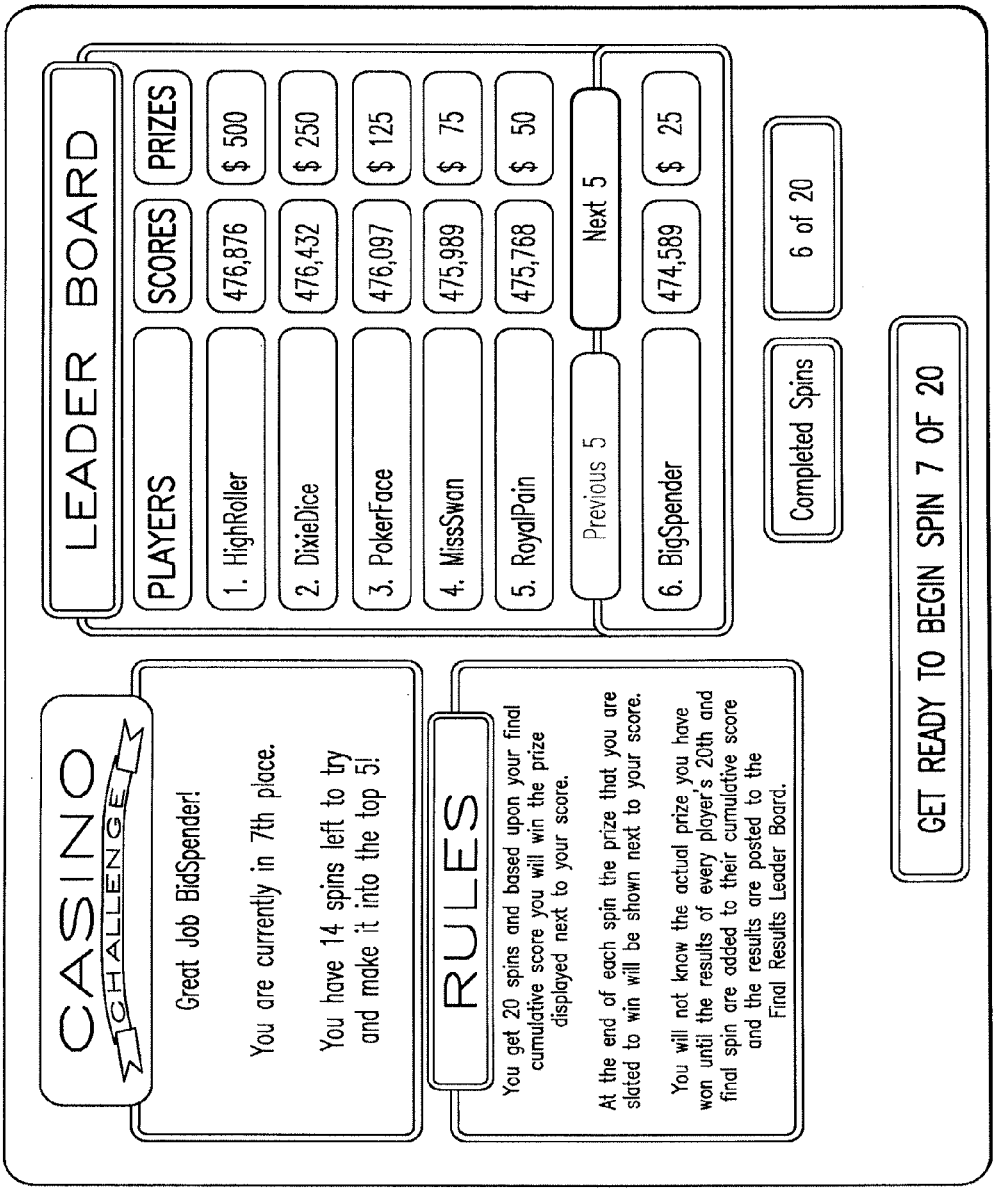


FIG.57

STEP 3

Player is in the middle of a tournament and is getting ready to begin Spin 7 of 20 Total Spins

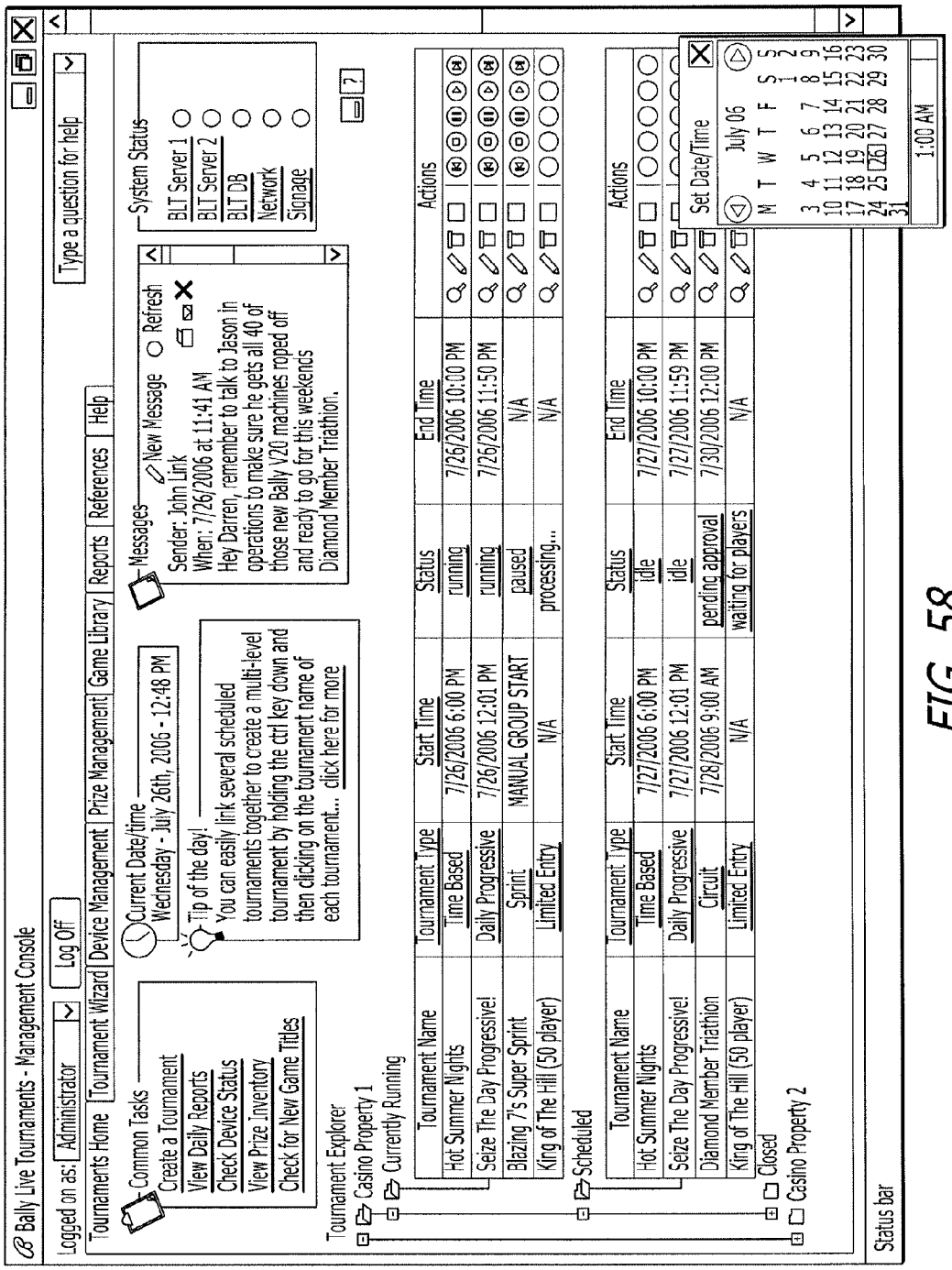

Bally Live Tournaments - Management Console
Logged on as: Administrator
Log Off
Type a question for help
Tournaments Home
Tournament Wizard
Device Management
Prize Management
Game Library
Reports
References
Help
Common Tasks
Create a Tournament
View Daily Reports
Check Device Status
View Prize Inventory
Check for New Game Titles
Current Date/time
Wednesday - July 26th, 2006 - 12:48 PM
Tip of the day!
You can easily link several scheduled tournaments together to create a multi-level tournament by holding the ctrl key down and then clicking on the tournament name of each tournament... click here for more
Messages
New Message
Refresh
Sender: John Link
When: 7/26/2006 at 11:41 AM
Hey Darren, remember to talk to Jason in operations to make sure he gets all 40 of those new Bally V20 machines roped off and ready to go for this weekends Diamond Member Triathlon.
System Status
BLT Server 1
BLT Server 2
BLT DB
Network
Signage
Tournament Explorer
Casino Property 1
Currently Running
Tournament Name
Tournament Type
Start Time
Status
End Time
Actions
Hot Summer Nights
Time Based
7/26/2006 6:00 PM
running
7/26/2006 10:00 PM
Seize The Day Progressive!
Daily Progressive
7/26/2006 12:01 PM
running
7/26/2006 11:50 PM
Blazing 7's Super Sprint
Sprint
MANUAL GROUP START
paused
N/A
King of The Hill (50 player)
Limited Entry
N/A
processing...
N/A
Scheduled
Tournament Name
Tournament Type
Start Time
Status
End Time
Actions
Hot Summer Nights
Time Based
7/27/2006 6:00 PM
idle
7/27/2006 10:00 PM
Seize The Day Progressive!
Daily Progressive
7/27/2006 12:01 PM
idle
7/27/2006 11:59 PM
Diamond Member Triathlon
Circuit
7/28/2006 9:00 AM
pending approval
7/30/2006 12:00 PM
King of The Hill (50 player)
Limited Entry
N/A
waiting for players
N/A
Closed
Casino Property 2
Set Date/Time
July 06
M T W T F S S
1:00 AM
Status bar

FIG. 58

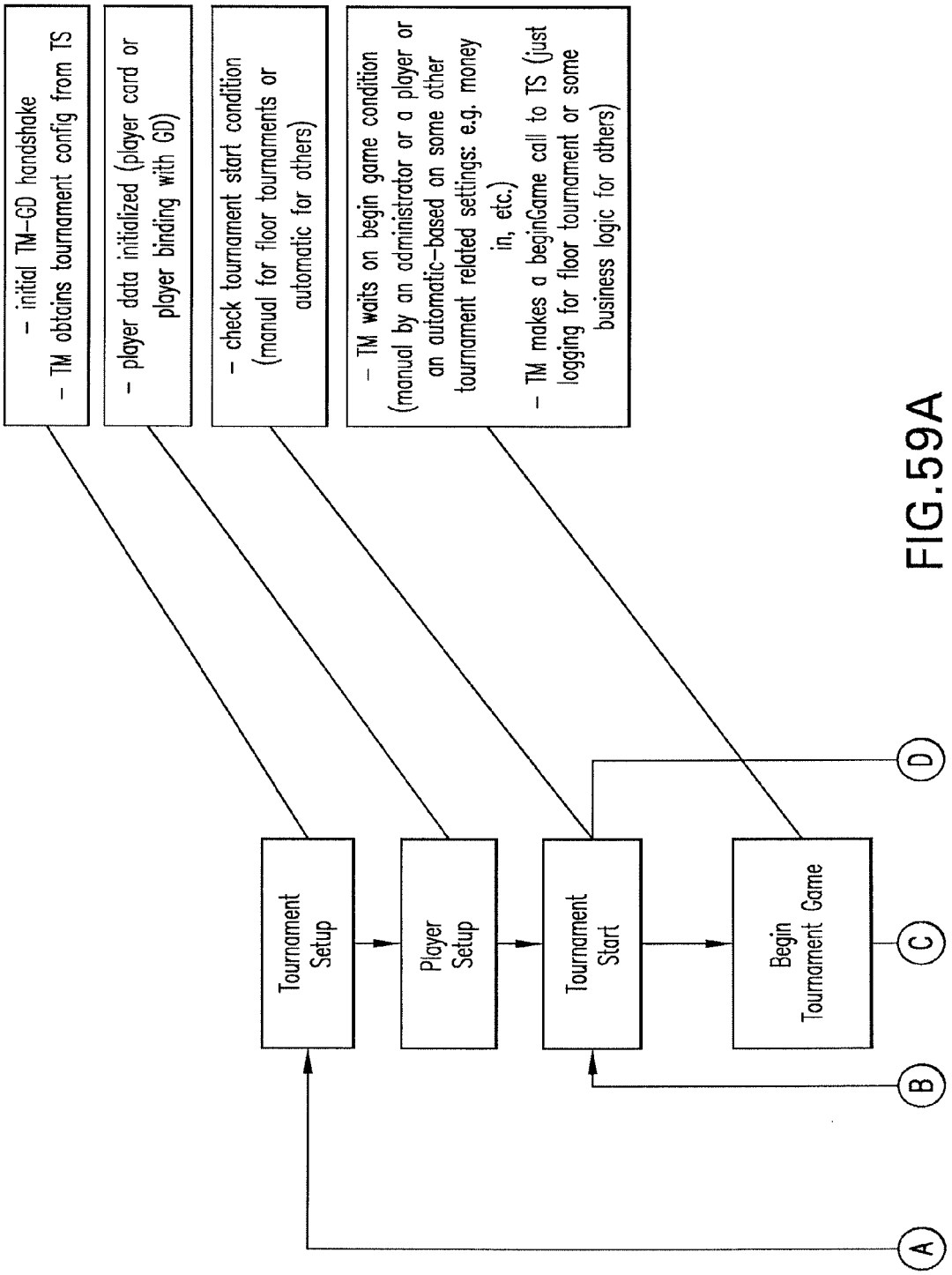

- initial TM-GD handshake
- TM obtains tournament config from TS
- player data initialized (player card or player binding with GD)
- check tournament start condition (manual for floor tournaments or automatic for others)
- TM waits on begin game condition (manual by an administrator or a player or an automatic-based on some other tournament related settings: e.g. money in, etc.)
- TM makes a beginGame call to TS (just logging for floor tournament or some business logic for others)
Tournament Setup
Player Setup
Tournament Start
Begin Tournament Game
A
B
C
D

FIG.59A

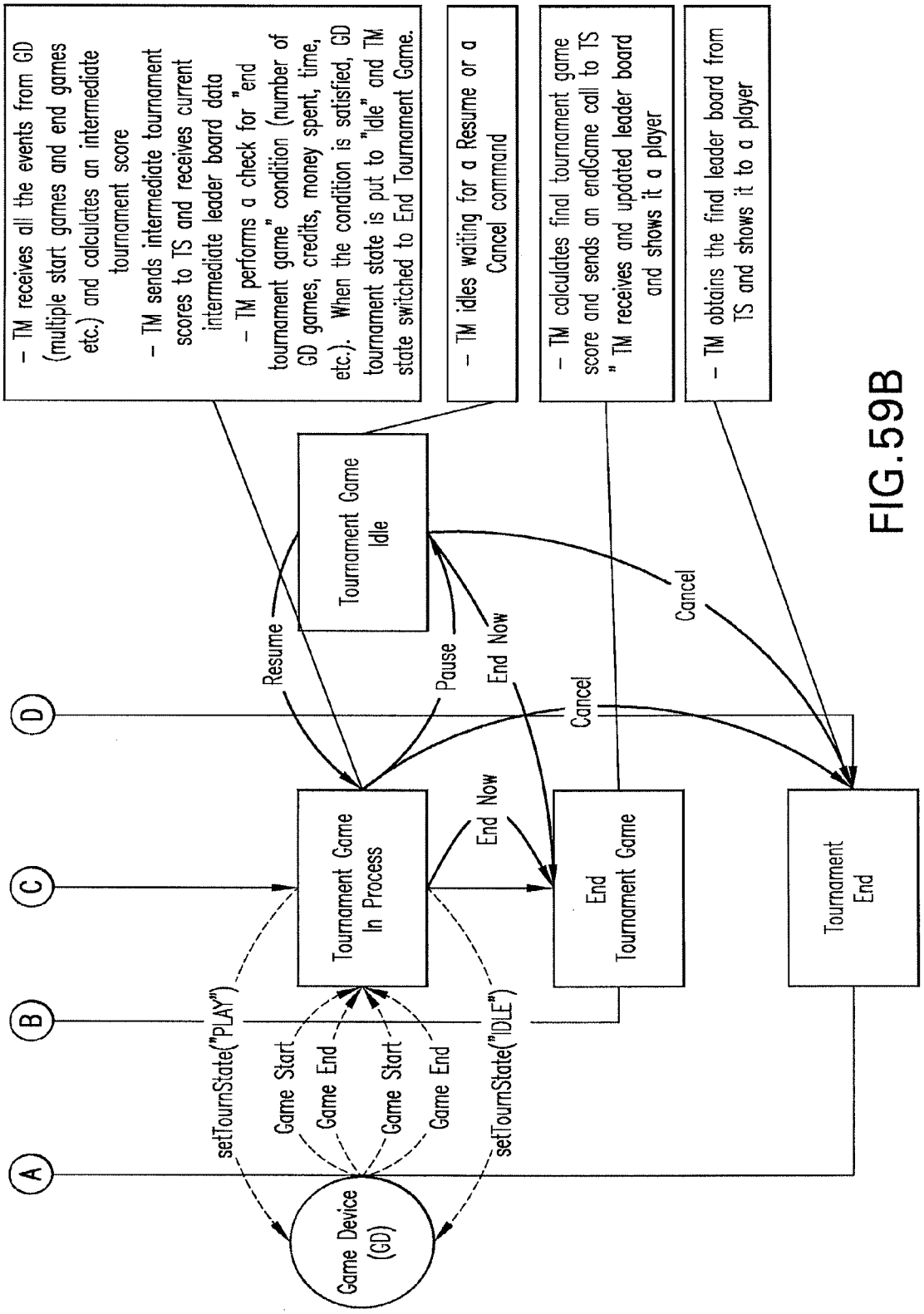

- TM receives all the events from GD (multiple start games and end games etc.) and calculates an intermediate tournament score
- TM sends intermediate tournament scores to TS and receives current intermediate leader board data
- TM performs a check for "end tournament game" condition (number of GD games, credits, money spent, time, etc.). When the condition is satisfied, GD tournament state is put to "Idle" and TM state switched to End Tournament Game.
- TM idles waiting for a Resume or a Cancel command
- TM calculates final tournament game score and sends an endGame call to TS
" TM receives and updated leader board and shows it a player
- TM obtains the final leader board from TS and shows it to a player
Tournament Game Idle
Tournament Game In Process
End Tournament Game
Tournament End
Game Device (GD)
setTournState("PLAY")
setTournState("IDLE")
Game Start
Game End
Game Start
Game End
Resume
Pause
End Now
Cancel
End Now
Cancel
A
B
C
D

FIG.59B

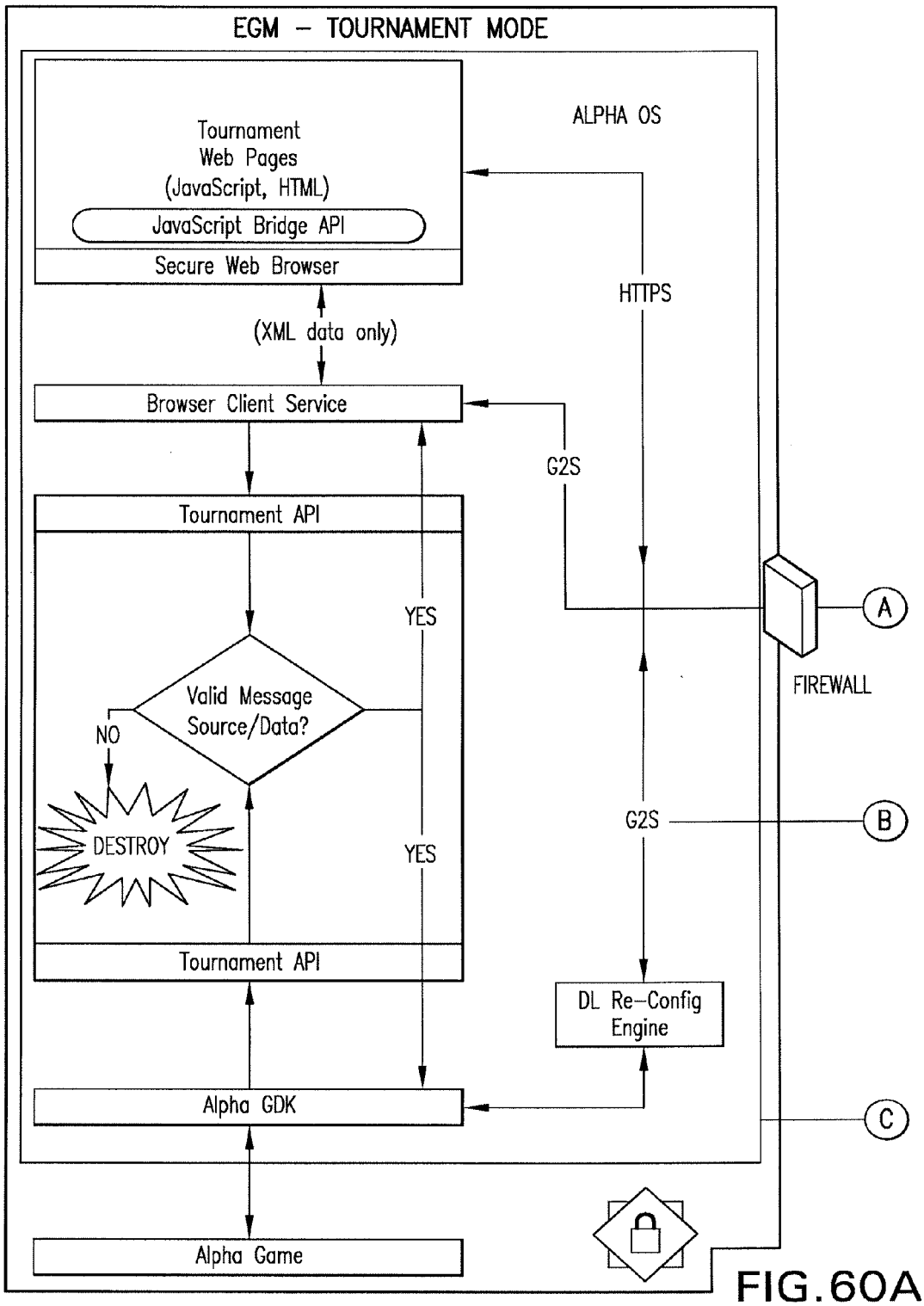

EGM – TOURNAMENT MODE
Tournament
Web Pages
(JavaScript, HTML)
JavaScript Bridge API
Secure Web Browser
ALPHA OS
HTTPS
(XML data only)
Browser Client Service
G2S
Tournament API
YES
Valid Message
Source/Data?
NO
DESTROY
YES
Tournament API
G2S
B
A
FIREWALL
DL Re–Config
Engine
Alpha GDK
C
Alpha Game

FIG.60A

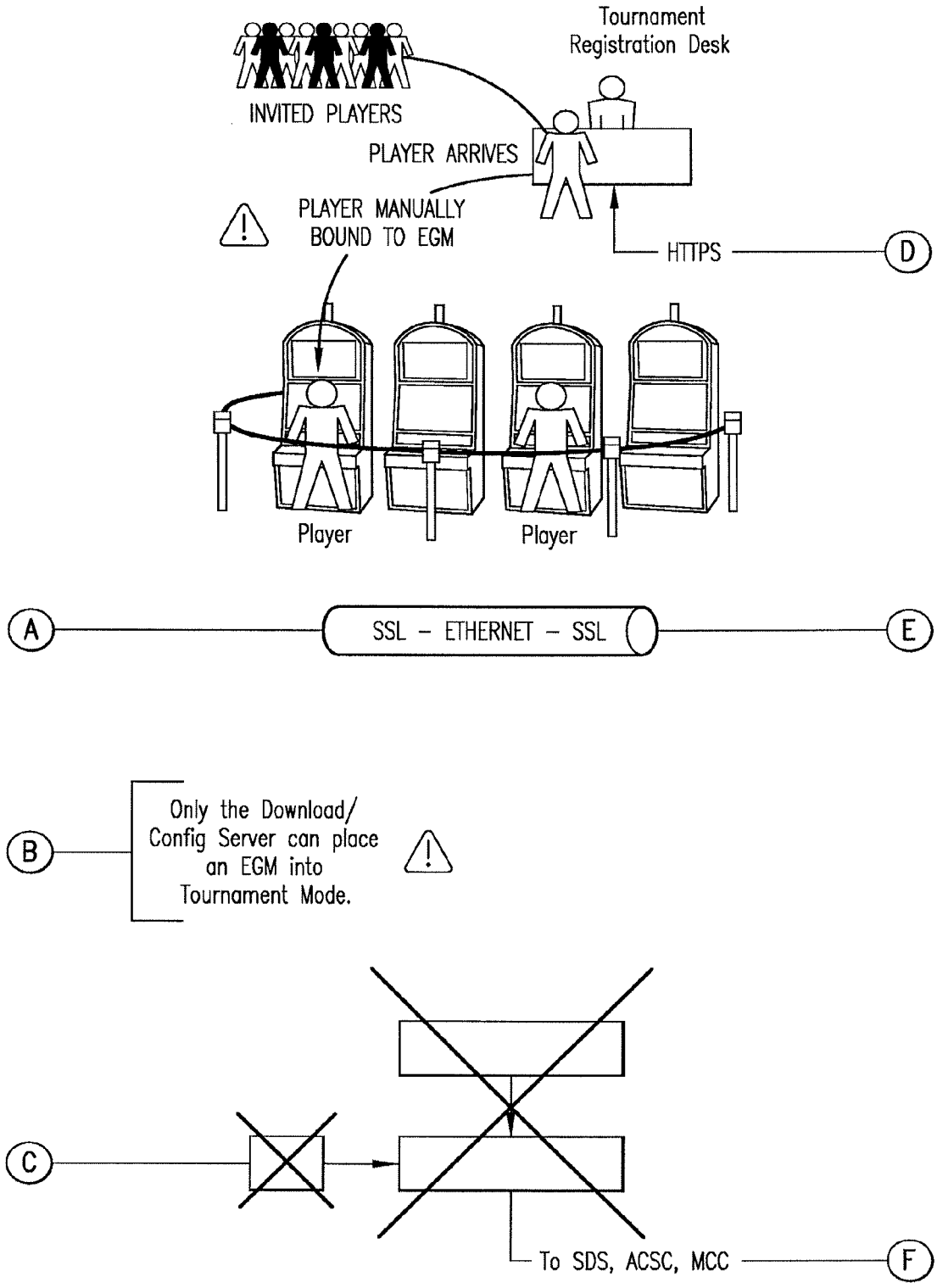

Tournament
Registration Desk
INVITED PLAYERS
PLAYER ARRIVES
PLAYER MANUALLY
BOUND TO EGM
HTTPS
D
Player
Player
A
SSL – ETHERNET – SSL
E
B
Only the Download/
Config Server can place
an EGM into
Tournament Mode.
C
To SDS, ACSC, MCC
F

FIG.60B

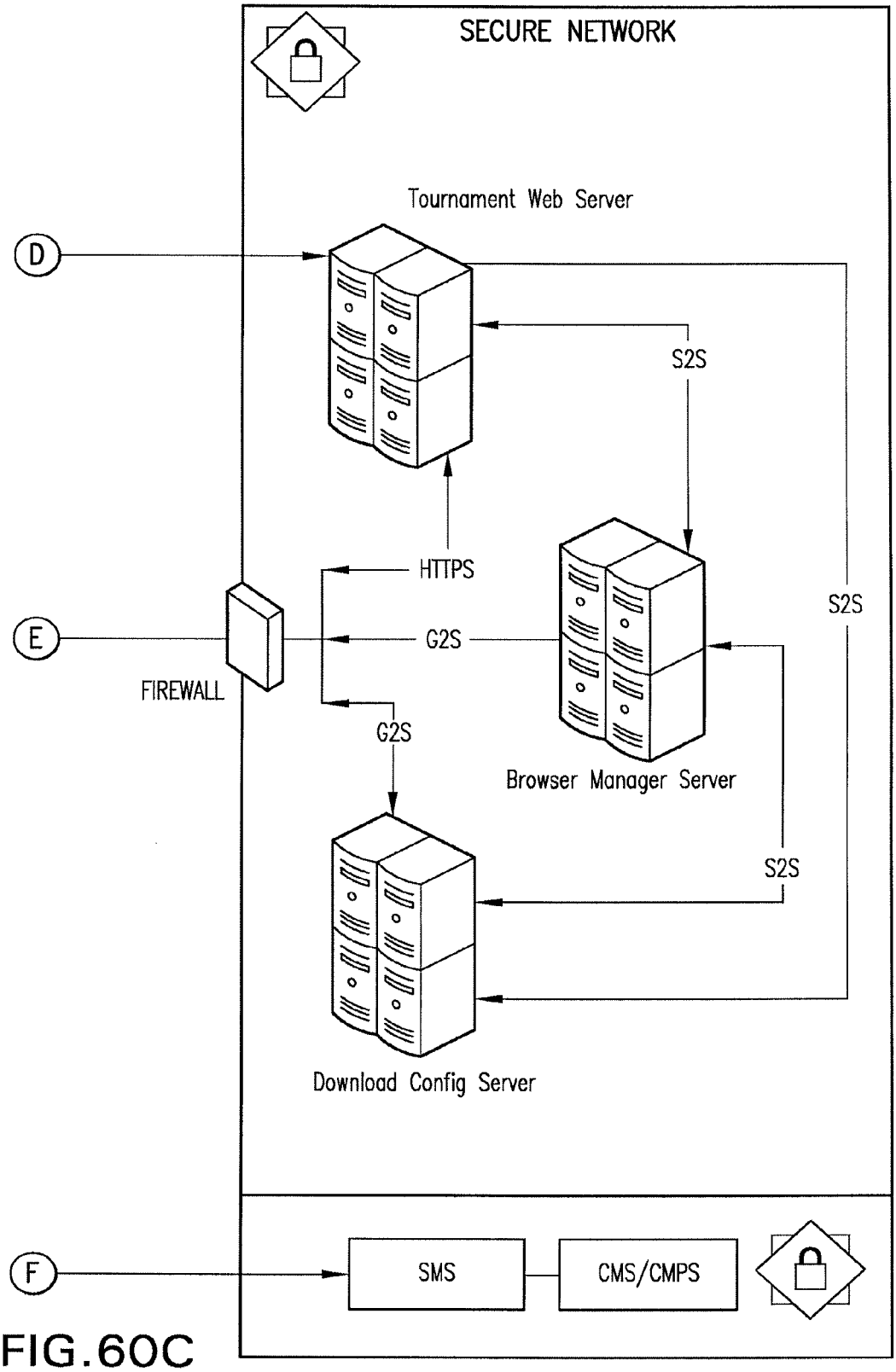

SECURE NETWORK
Tournament Web Server
D
S2S
HTTPS
E
G2S
FIREWALL
S2S
G2S
Browser Manager Server
S2S
Download Config Server
F
SMS
CMS/CMPS

FIG.60C

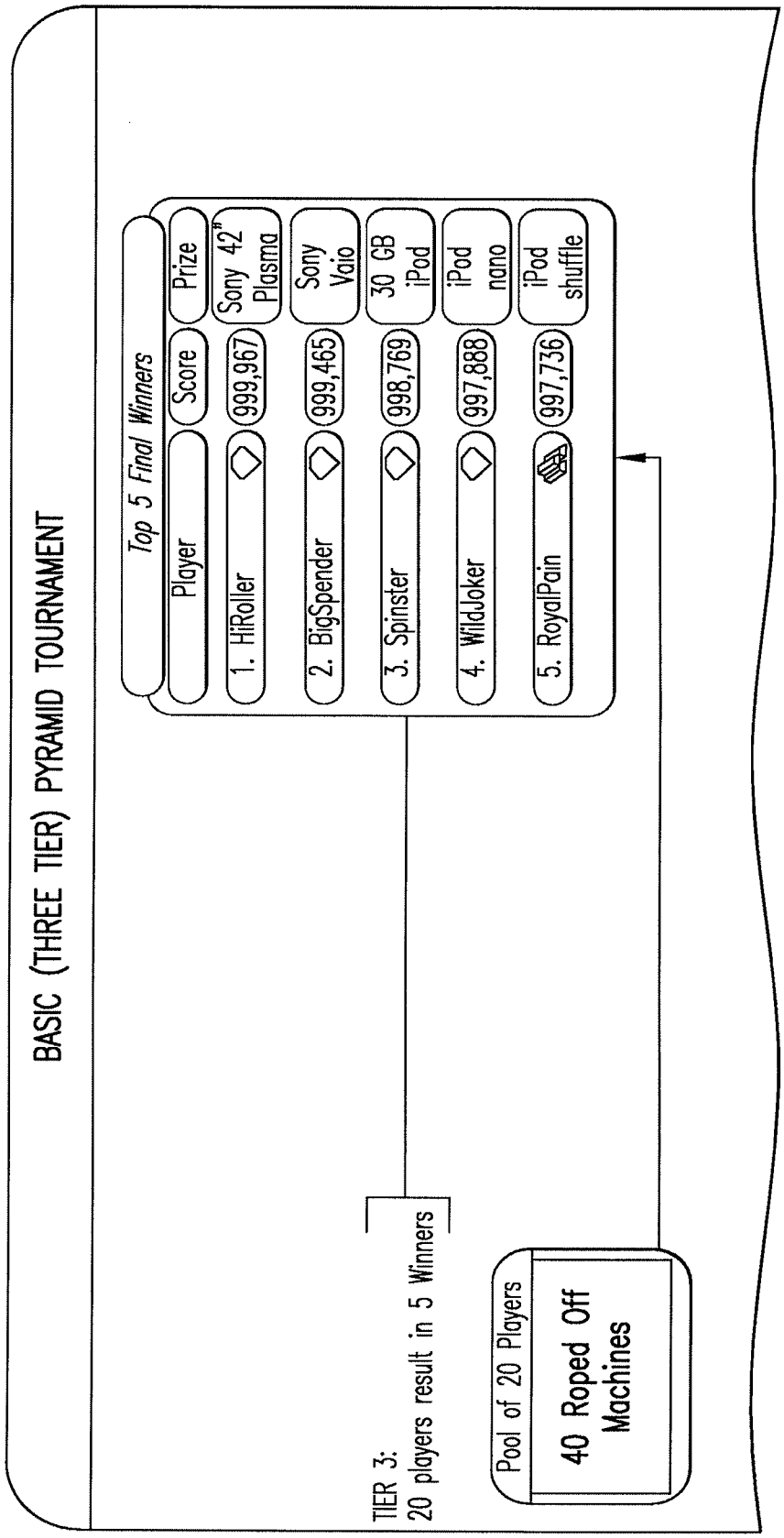

BASIC (THREE TIER) PYRAMID TOURNAMENT
Top 5 Final Winners
Player
Score
Prize
1. HiRoller
999,967
Sony 42" Plasma
2. BigSpender
999,465
Sony Vaio
3. Spinster
998,769
30 GB iPod
4. WildJoker
997,888
iPod nano
5. RoyalPain
997,736
iPod shuffle
TIER 3:
20 players result in 5 Winners
Pool of 20 Players
40 Roped Off Machines

FIG.61A

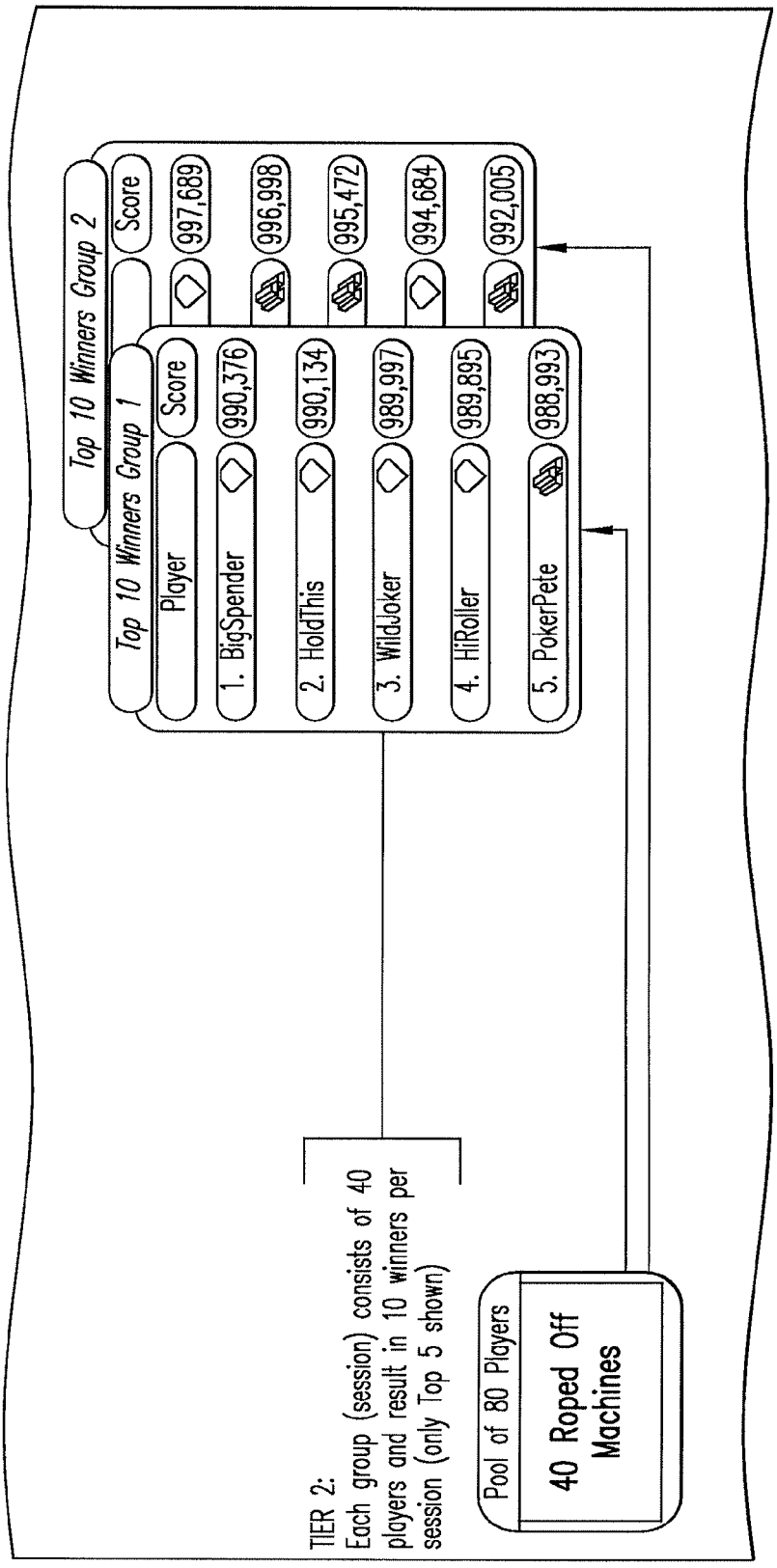

Top 10 Winners Group 1
Player
Score
1. BigSpender
990,376
2. HoldThis
990,134
3. WildJoker
989,997
4. HiRoller
989,895
5. PokerPete
988,993
Top 10 Winners Group 2
Score
997,689
996,998
995,472
994,684
992,005
TIER 2:
Each group (session) consists of 40 players and result in 10 winners per session (only Top 5 shown)
Pool of 80 Players
40 Roped Off Machines

FIG.61B

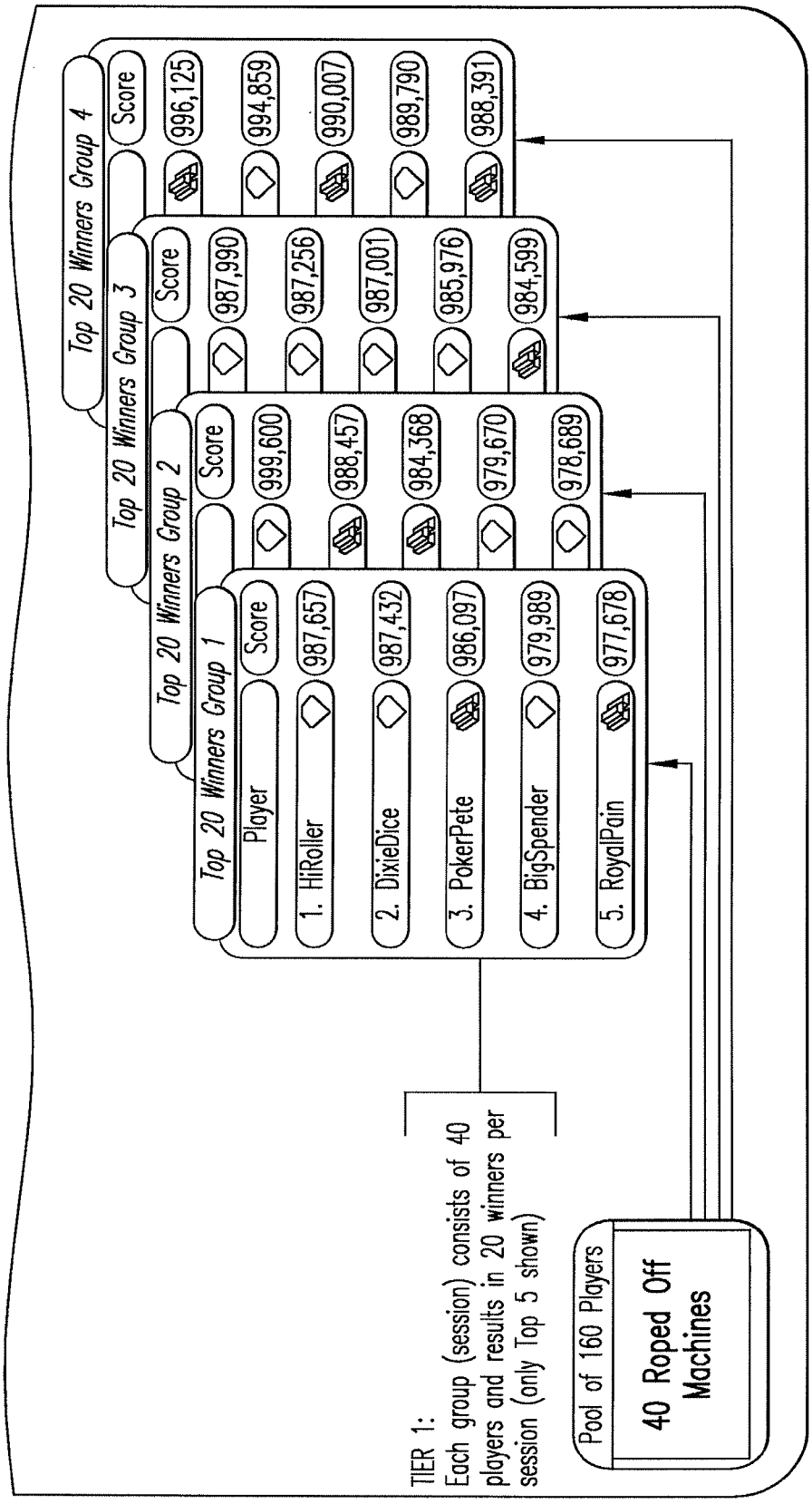
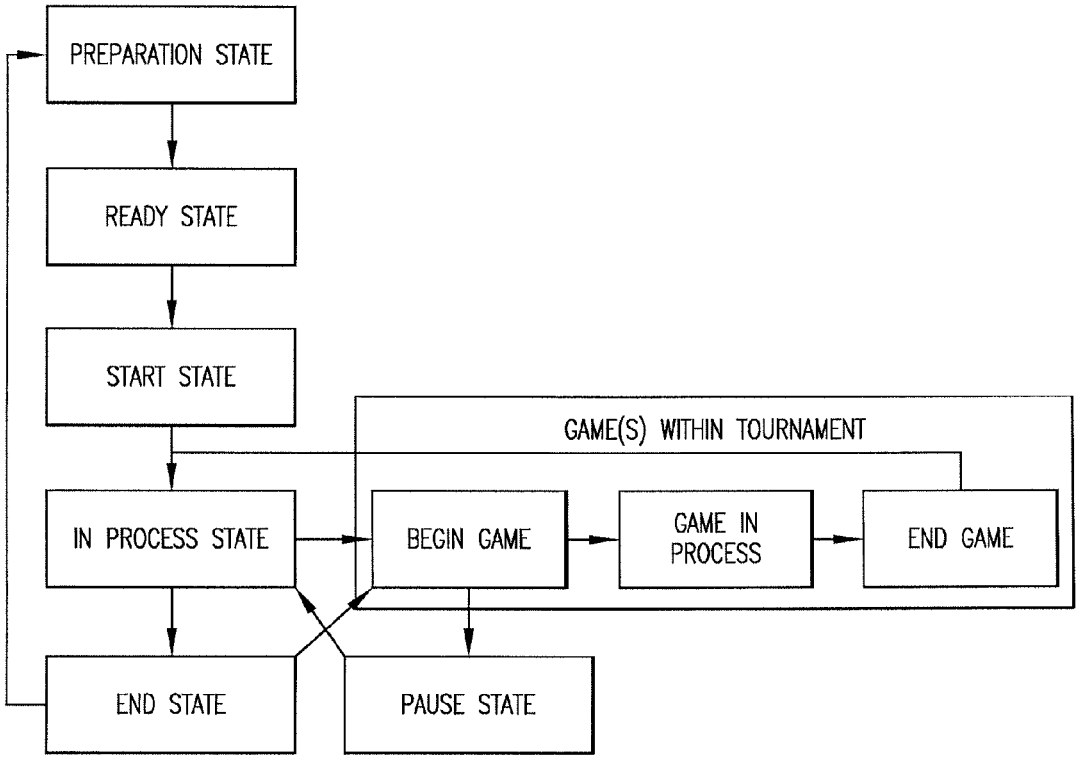

Top 20 Winners Group 1
Player
1. HiRoller
2. DixieDice
3. PokerPete
4. BigSpender
5. RoyalPain
Score
987,657
987,432
986,097
979,989
977,678
Top 20 Winners Group 2
Score
999,600
988,457
984,368
979,670
978,689
Top 20 Winners Group 3
Score
987,990
987,256
987,001
985,976
984,599
Top 20 Winners Group 4
Score
996,125
994,859
990,007
989,790
988,391
TIER 1:
Each group (session) consists of 40 players and results in 20 winners per session (only Top 5 shown)
Pool of 160 Players
40 Roped Off Machines

FIG.61C



Messages in various states of tournament

PREPARATION:

TM–GD: registerEvents()
TM–GD: getDeviceInfo()
TM–GD: getActiveGameInfo()

READY:

TM–TS: getTournamentConfig()
TM–TS: getPlayerInfo()
NVRAM

START:

TM–TS: canStart()
TM–GD: setConfigData()
TM–GD: getMetersInfo()
TM–GD: setTournState()

IN PROCESS:

Inbuilt logic

BEGIN GAME:
TM–TS: beginGame()
TM–GD: setTournState()– Allow
GAME IN–PROCESS:
TM–TS: intermediateScorePost()
GD–TM: subscribed events
GAME END:
TM–TS: endGame()
TM–GD: setTournGame()–Pause

END:
TM–TS: getTournData()
TM–GD: setTournState()– End

FIG.62

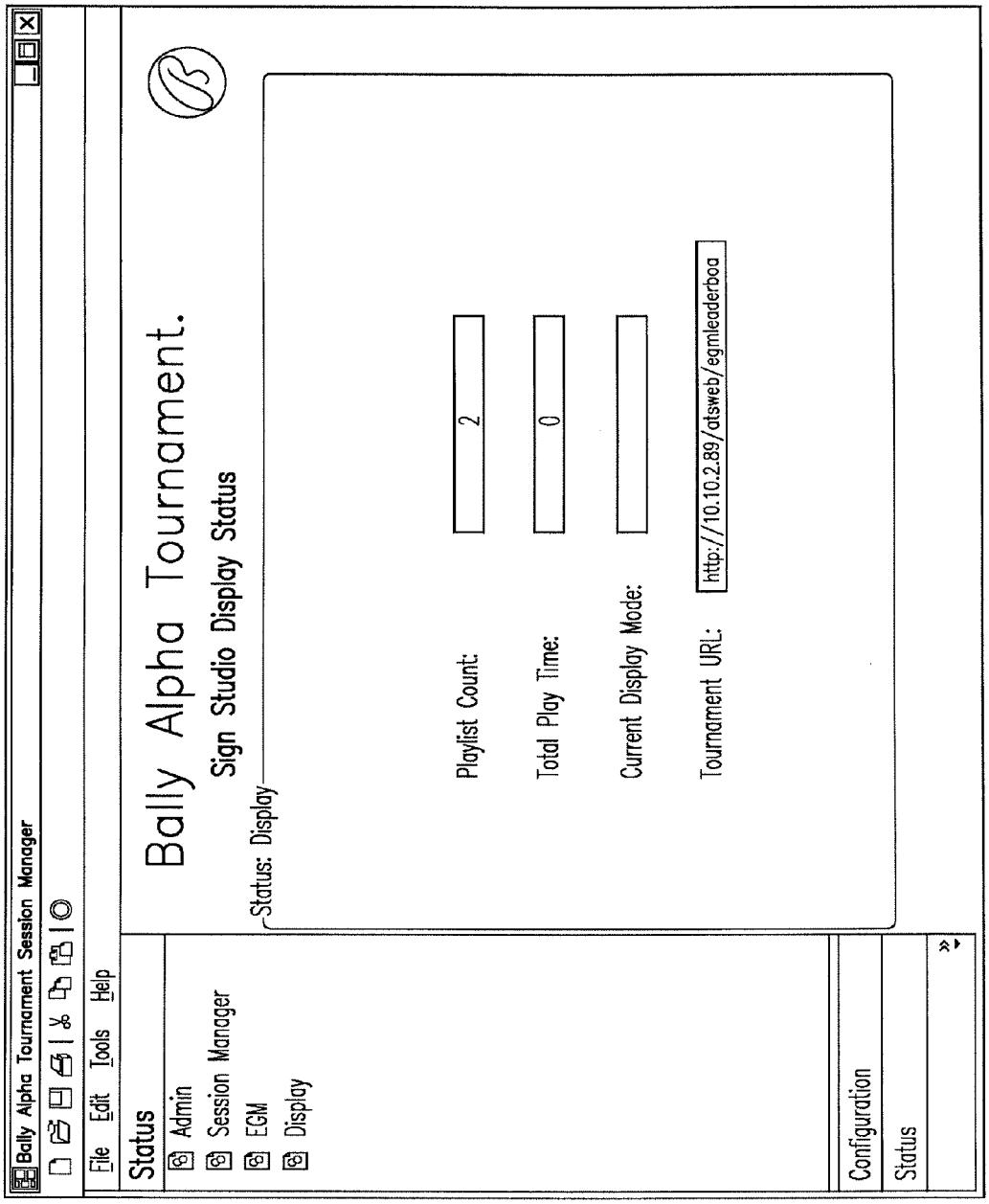

Bally Alpha Tournament Session Manager
File Edit Tools Help
Status
Admin
Session Manager
EGM
Display
Bally Alpha Tournament.
Sign Studio Display Status
Status: Display
Playlist Count:
2
Total Play Time:
0
Current Display Mode:
Tournament URL:
http://10.10.2.89/atsweb/egmleaderboa
Configuration
Status

FIG.63

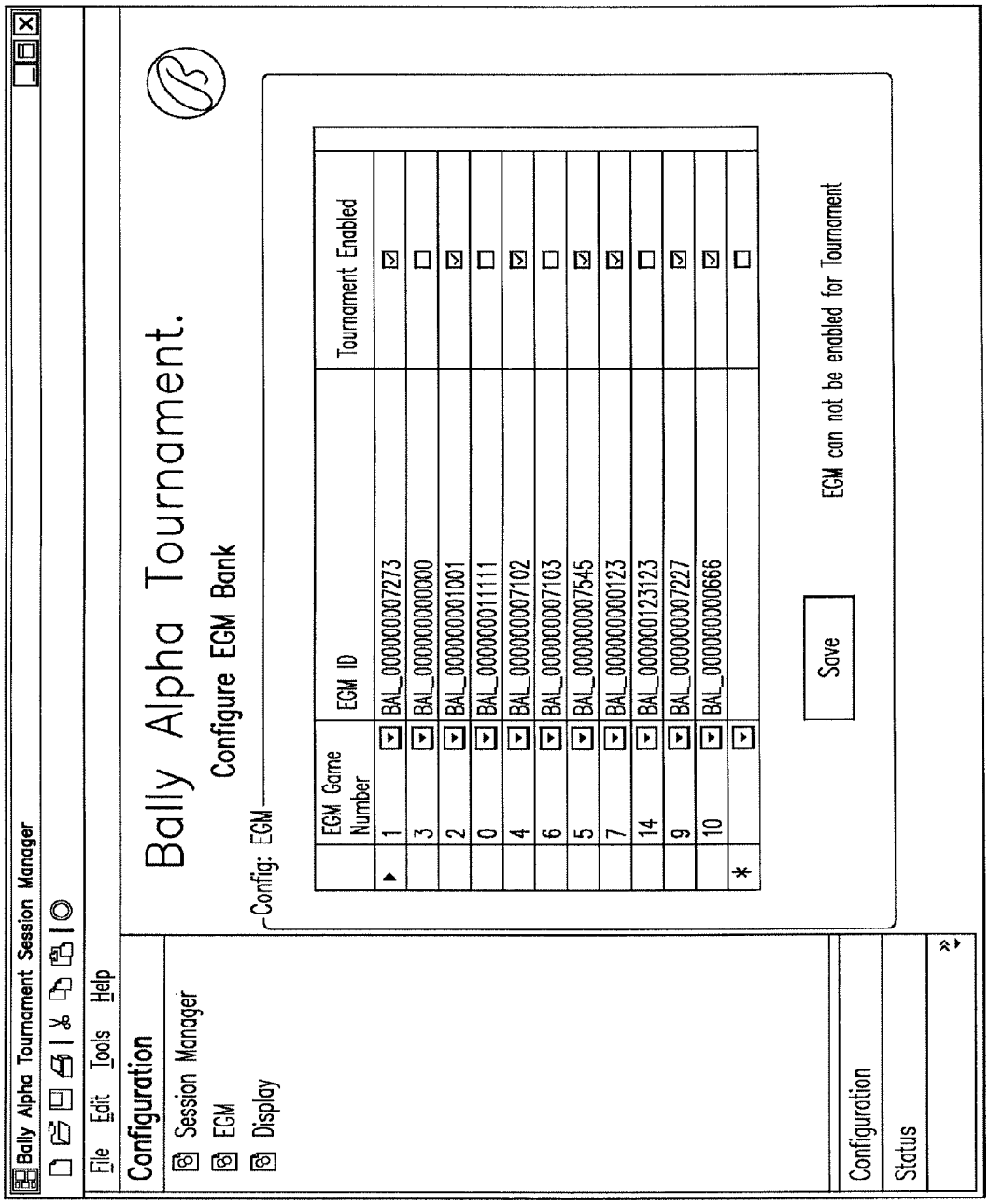

Bally Alpha Tournament Session Manager
File Edit Tools Help
Configuration
Session Manager
EGM
Display
Bally Alpha Tournament.
Configure EGM Bank
Config: EGM
EGM Game Number
EGM ID
Tournament Enabled
1 BAL_000000007273
3 BAL_000000000000
2 BAL_000000001001
0 BAL_000000011111
4 BAL_000000007102
6 BAL_000000007103
5 BAL_000000007545
7 BAL_000000000123
14 BAL_000000123123
9 BAL_000000007227
10 BAL_000000000666
Save
EGM can not be enabled for Tournament
Configuration
Status

FIG.64

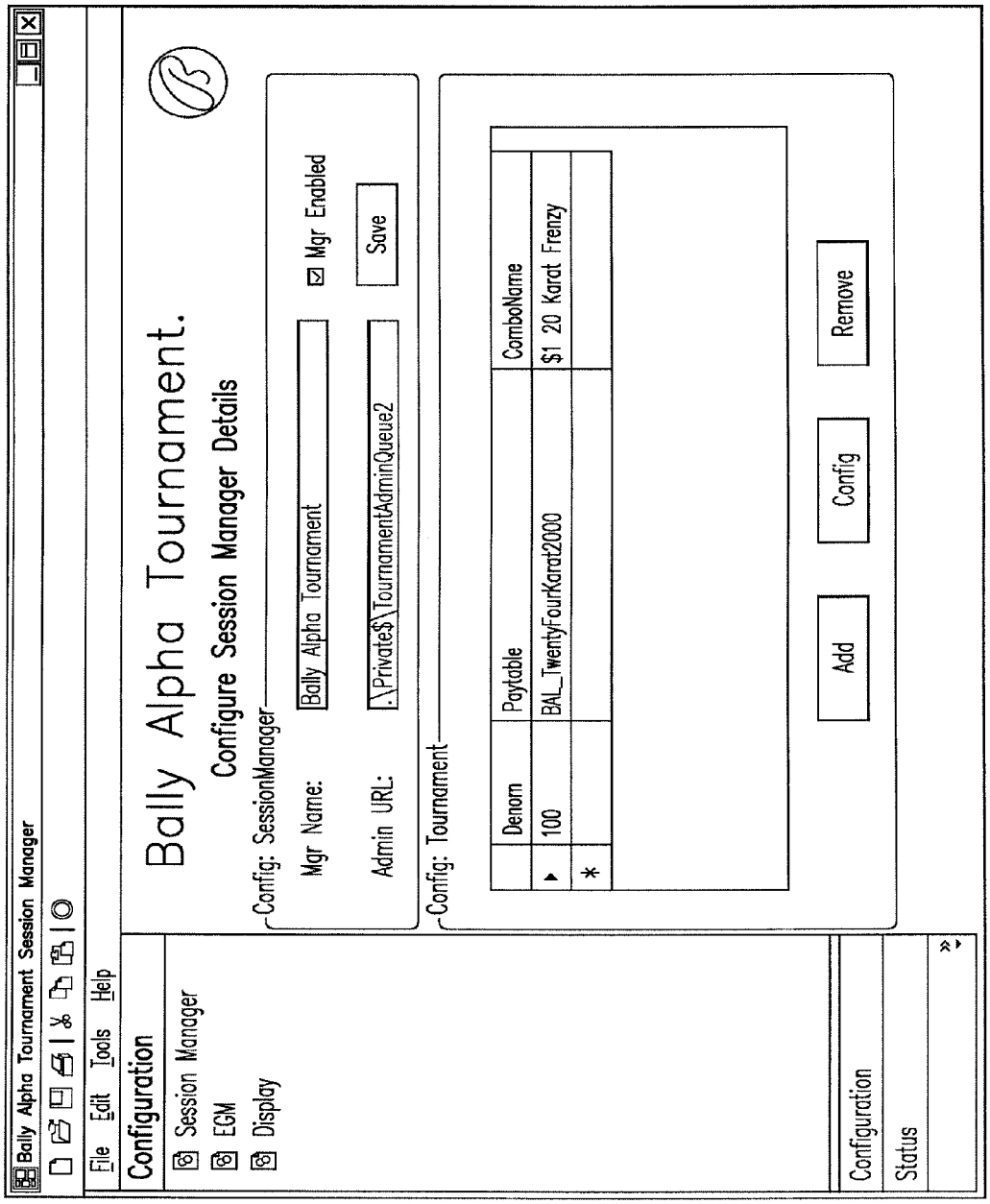

Bally Alpha Tournament Session Manager
File Edit Tools Help
Configuration
Session Manager
EGM
Display
Bally Alpha Tournament.
Configure Session Manager Details
Config: SessionManager
Mgr Name:
Bally Alpha Tournament
Mgr Enabled
Admin URL:
.\Private$\TournamentAdminQueue2
Save
Config: Tournament
Denom
Paytable
ComboName
100
BAL_TwentyFourKarat2000
$1 20 Karat Frenzy
Add
Config
Remove
Configuration
Status

FIG.65

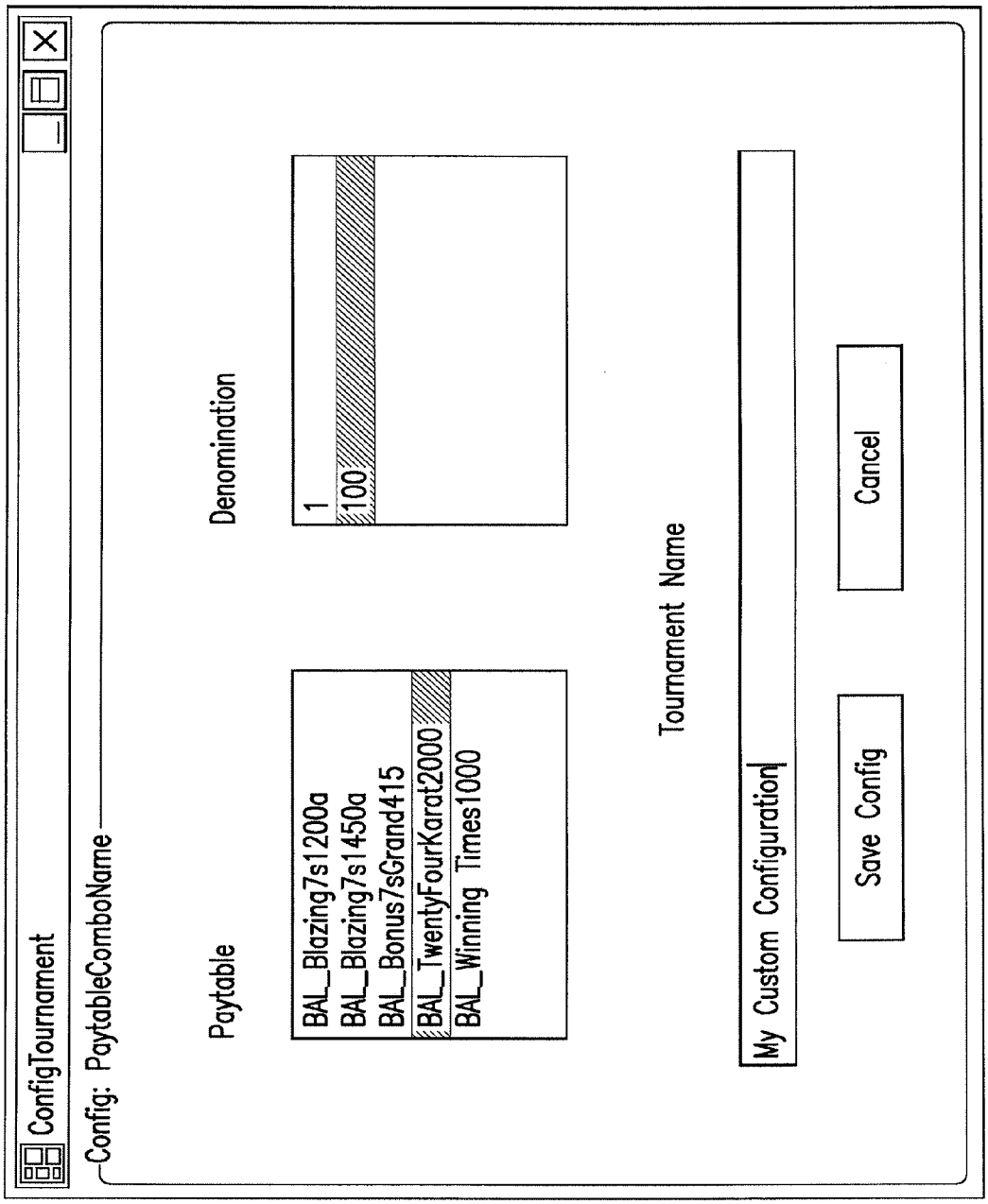

ConfigTournament
Config: PaytableComboName
Paytable
BAL_Blazing7s1200a
BAL_Blazing7s1450a
BAL_Bonus7sGrand415
BAL_TwentyFourKarat2000
BAL_Winning Times1000
Denomination
1
100
Tournament Name
My Custom Configuration
Save Config
Cancel

FIG.66

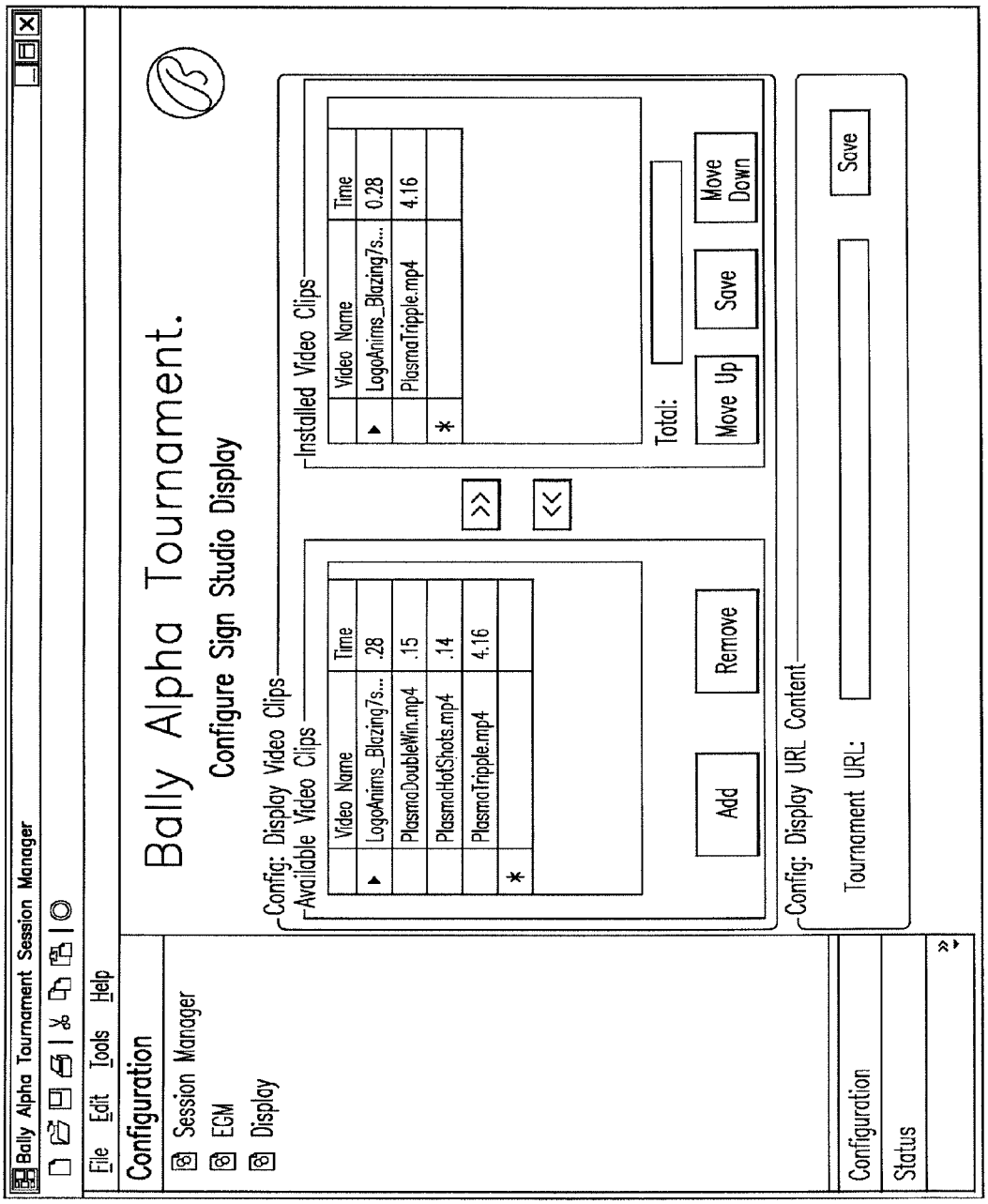

Bally Alpha Tournament Session Manager
File Edit Tools Help
Configuration
Session Manager
EGM
Display
Bally Alpha Tournament.
Configure Sign Studio Display
Config: Display Video Clips
Available Video Clips
Video Name
Time
LogoAnims_Blazing7s...
.28
PlasmaDoubleWin.mp4
.15
PlasmaHotShots.mp4
.14
PlasmaTripple.mp4
4.16
Add
Remove
>>
<<
Installed Video Clips
Video Name
Time
LogoAnims_Blazing7s...
0.28
PlasmaTripple.mp4
4.16
Total:
Move Up
Save
Move Down
Config: Display URL Content
Tournament URL:
Save
Configuration
Status

FIG.67

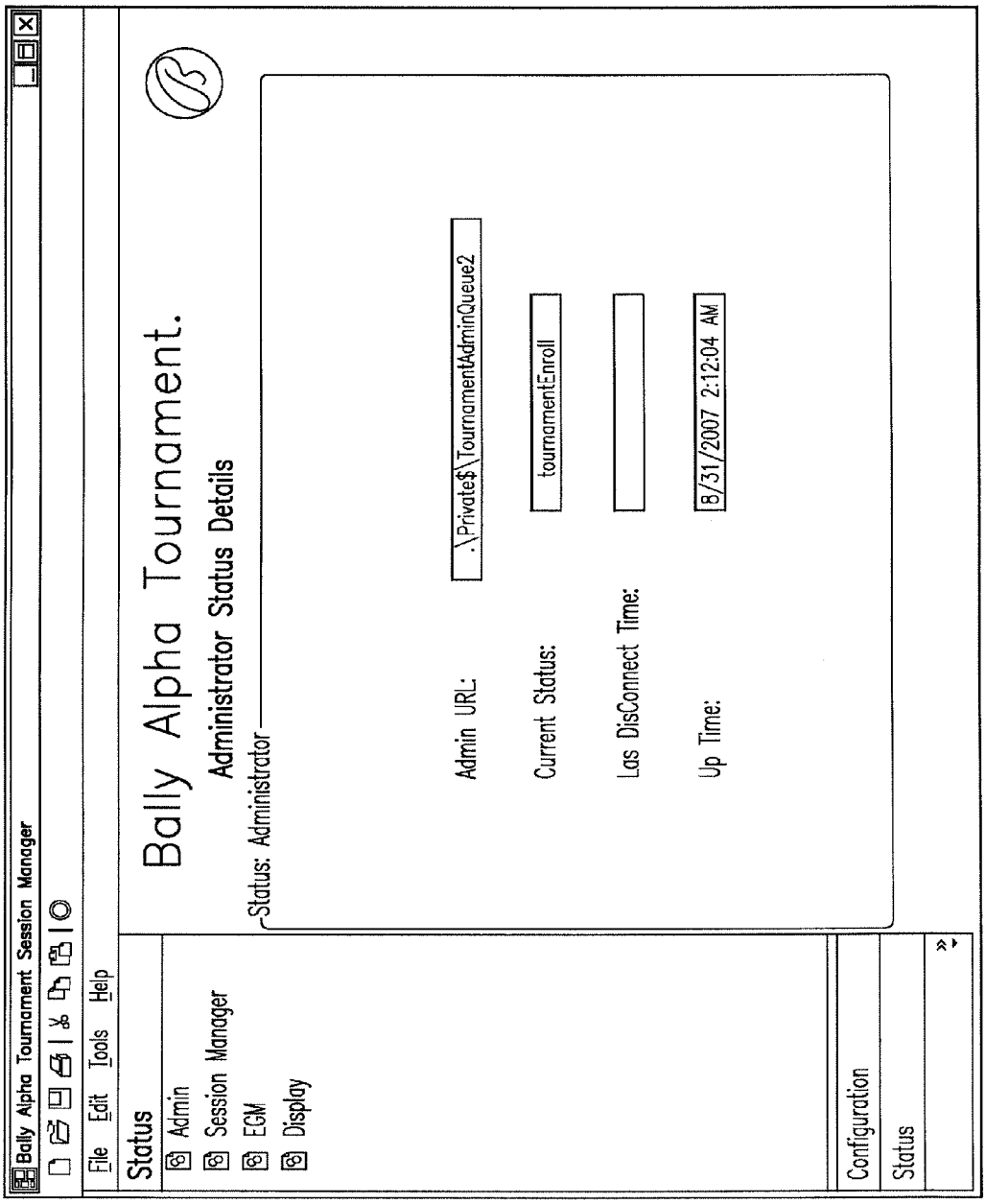

Bally Alpha Tournament Session Manager
File Edit Tools Help
Status
Admin
Session Manager
EGM
Display
Bally Alpha Tournament.
Administrator Status Details
Status: Administrator
Admin URL:
.\Private$\TournamentAdminQueue2
Current Status:
tournamentEnroll
Las DisConnect Time:
Up Time:
8/31/2007 2:12:04 AM
Configuration
Status

FIG.68

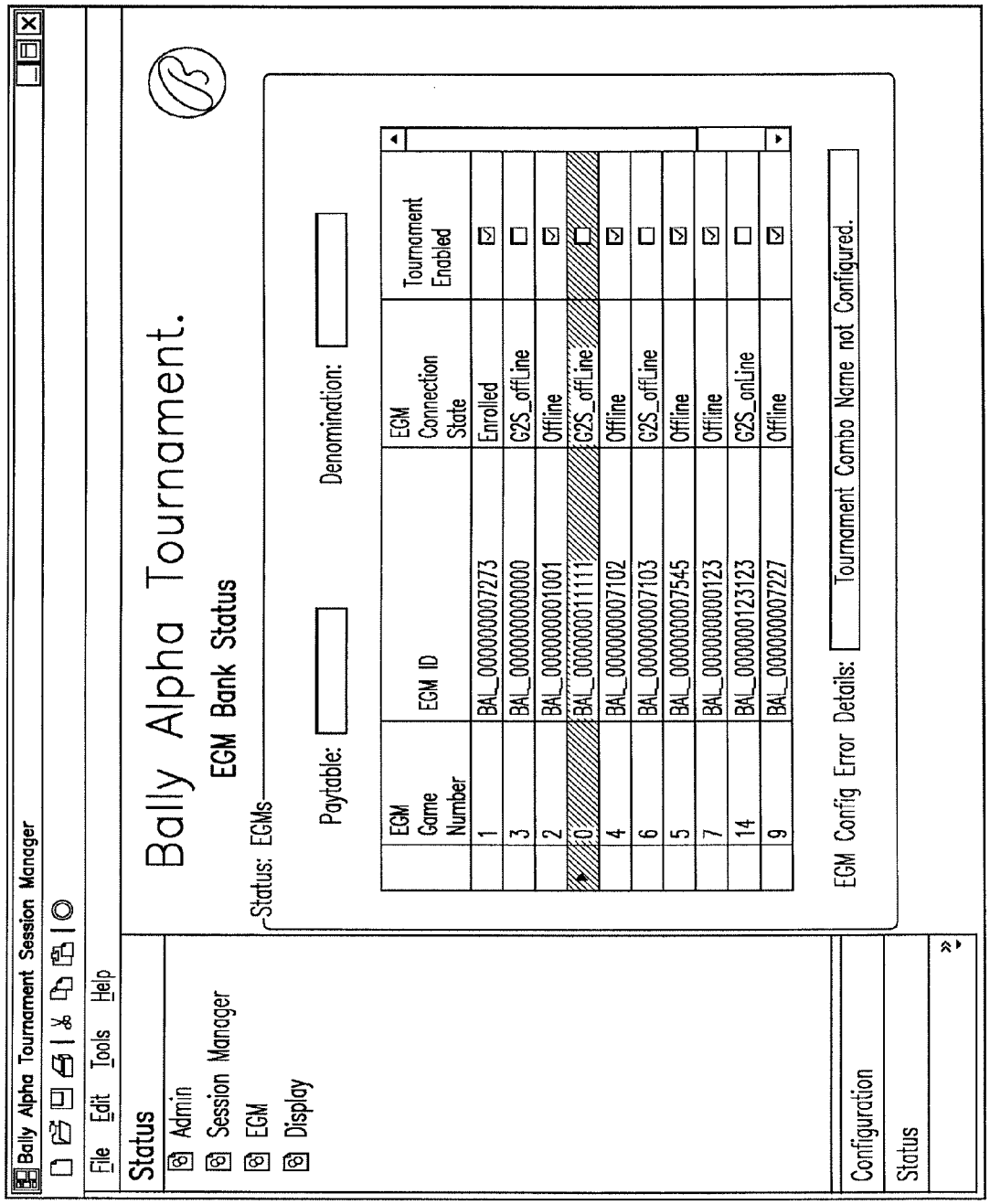

Bally Alpha Tournament Session Manager
File Edit Tools Help
Status
Admin
Session Manager
EGM
Display
Bally Alpha Tournament.
EGM Bank Status
Status: EGMs
Paytable:
Denomination:
EGM Game Number
EGM ID
EGM Connection State
Tournament Enabled
1 BAL_000000007273 Enrolled
3 BAL_000000000000 G2S_offLine
2 BAL_000000001001 Offline
0 BAL_000000011111 G2S_offLine
4 BAL_000000007102 Offline
6 BAL_000000007103 G2S_offLine
5 BAL_000000007545 Offline
7 BAL_000000000123 Offline
14 BAL_000000123123 G2S_onLine
9 BAL_000000007227 Offline
EGM Config Error Details:
Tournament Combo Name not Configured.
Configuration
Status

FIG.69

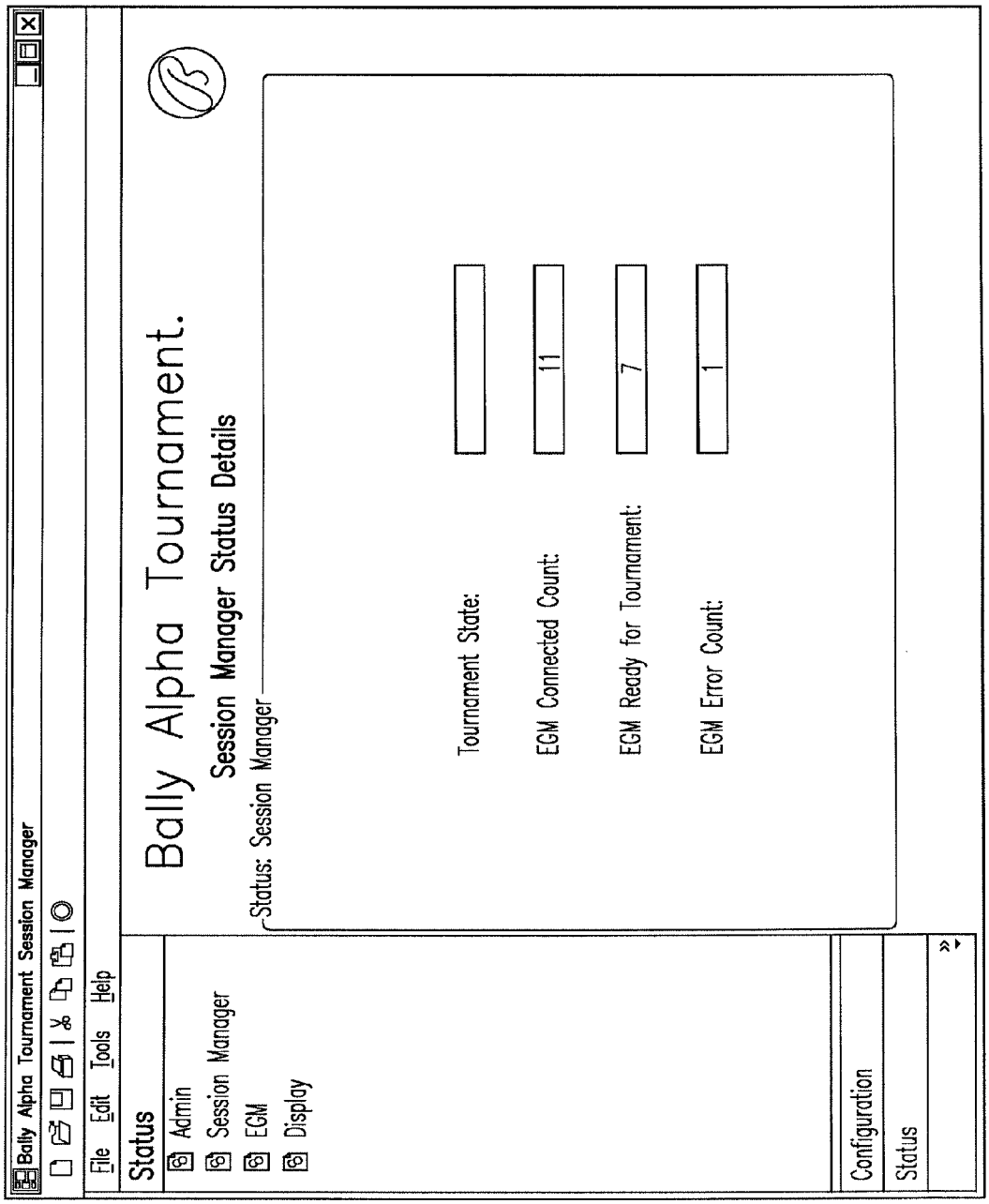

Bally Alpha Tournament Session Manager
File Edit Tools Help
Status
Admin
Session Manager
EGM
Display
Bally Alpha Tournament.
Session Manager Status Details
Status: Session Manager
Tournament State:
EGM Connected Count:
11
EGM Ready for Tournament:
7
EGM Error Count:
1
Configuration
Status

FIG. 70

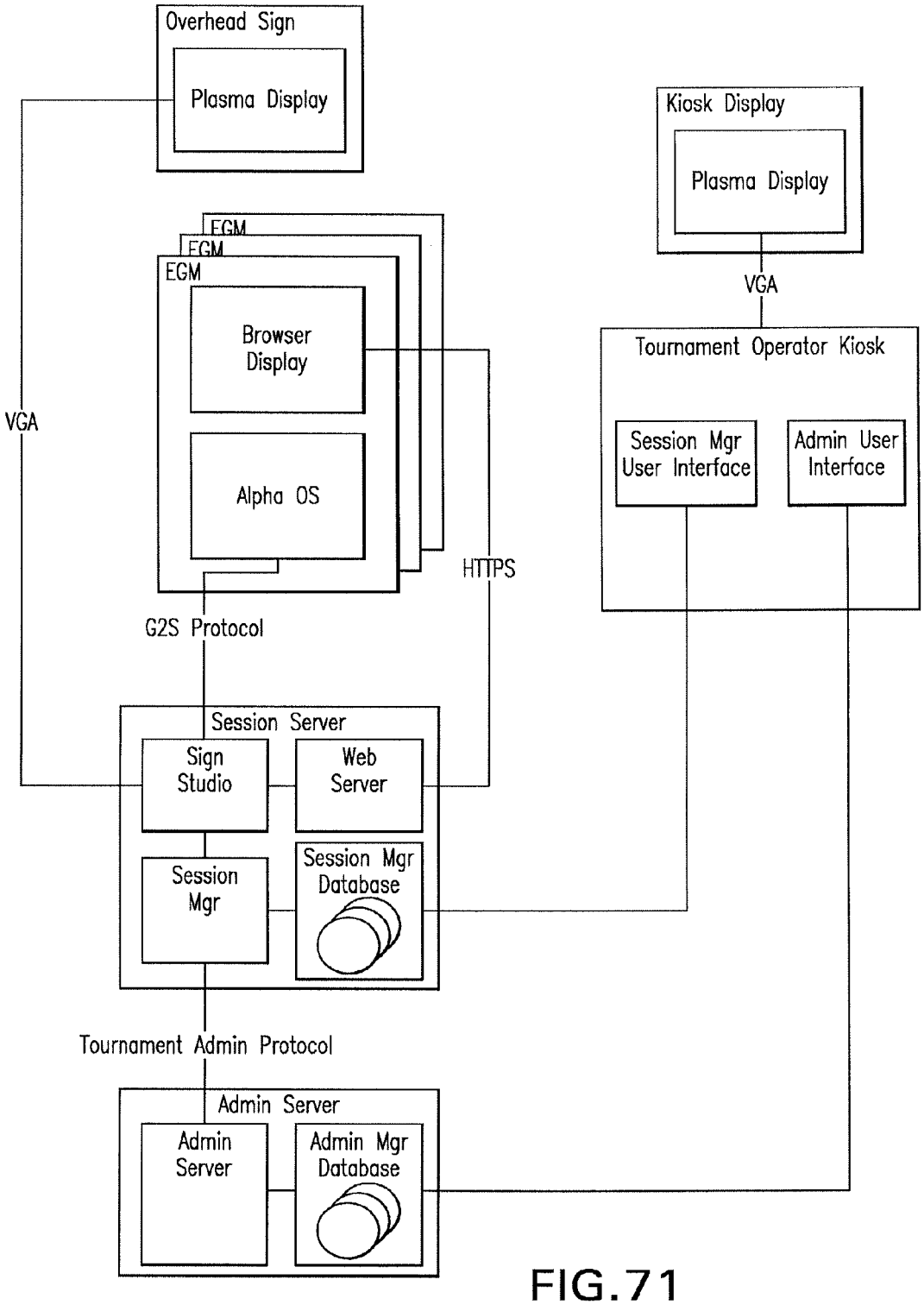

Overhead Sign
Plasma Display
Kiosk Display
Plasma Display
VGA
EGM
EGM
EGM
Browser Display
Alpha OS
Tournament Operator Kiosk
Session Mgr User Interface
Admin User Interface
VGA
HTTPS
G2S Protocol
Session Server
Sign Studio
Web Server
Session Mgr
Session Mgr Database
Tournament Admin Protocol
Admin Server
Admin Server
Admin Mgr Database

FIG. 71

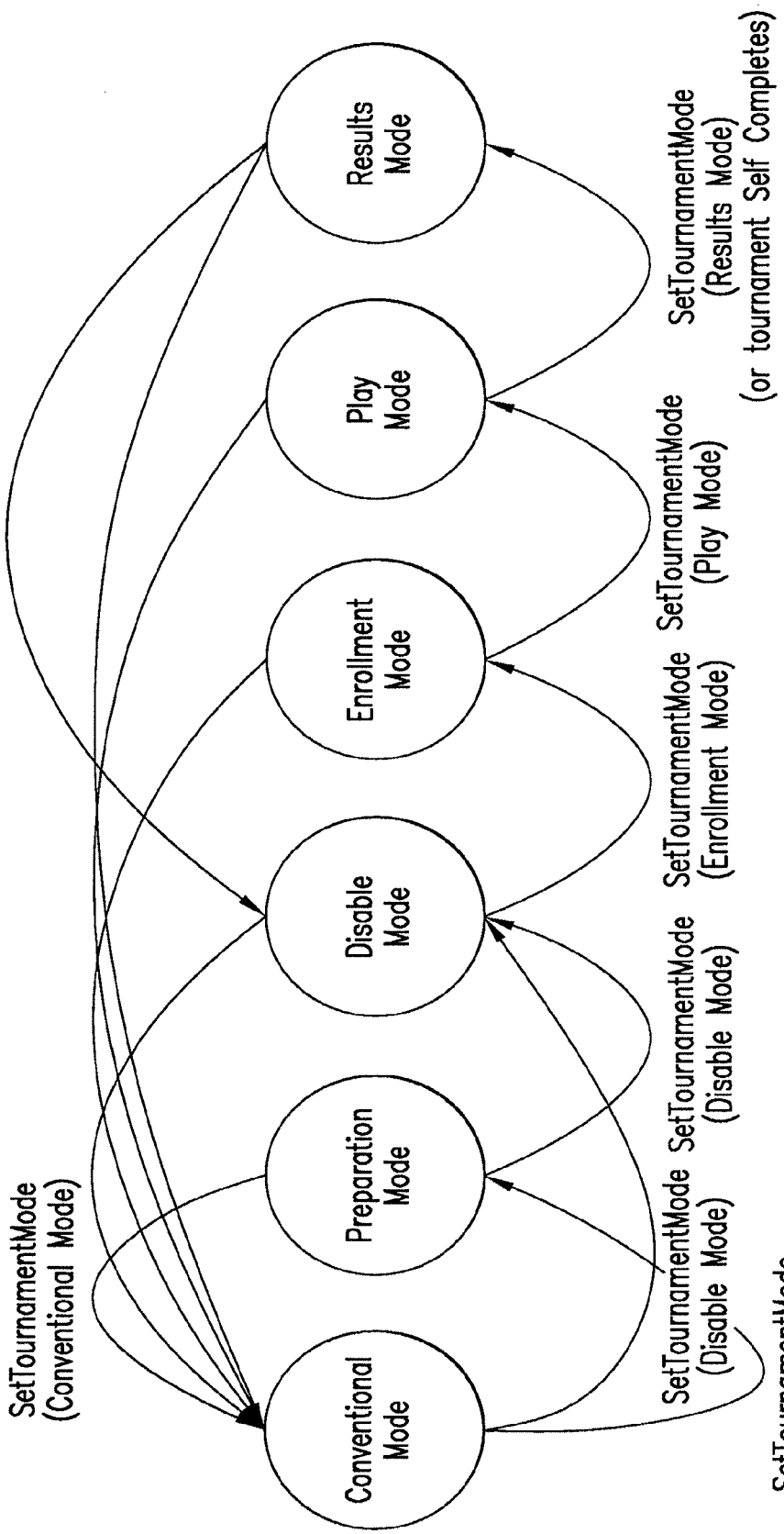
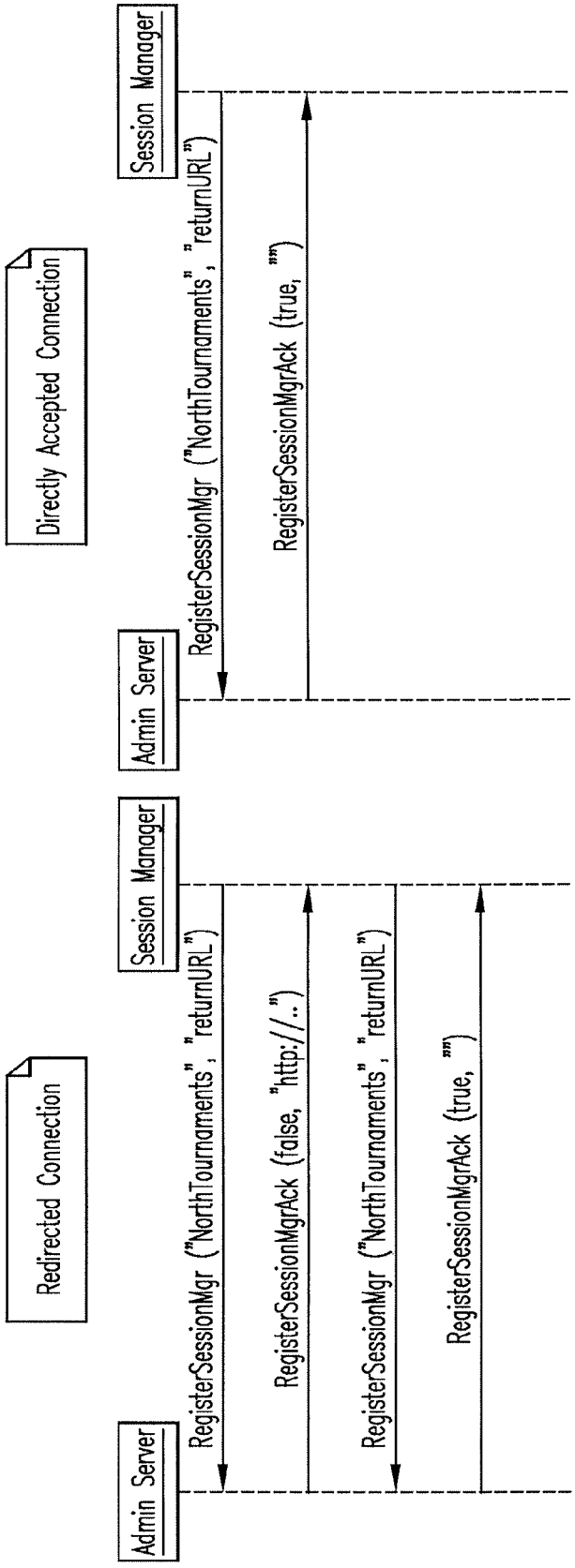
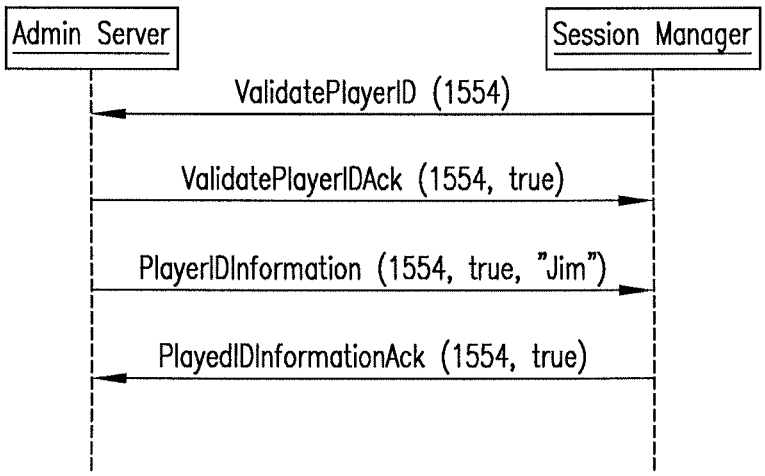

Conventional Mode
Preparation Mode
Disable Mode
Enrollment Mode
Play Mode
Results Mode
SetTournamentMode (Conventional Mode)
SetTournamentMode (Disable Mode)
SetTournamentMode (Disable Mode)
SetTournamentMode (Preparation Mode)
SetTournamentMode (Disable Mode)
SetTournamentMode (Enrollment Mode)
SetTournamentMode (Play Mode)
SetTournamentMode (Results Mode) (or tournament Self Completes)

FIG. 72



CONNECTION SEQUENCE

FIG. 73



PLAYER ENROLLMENT SEQUENCE

FIG.74

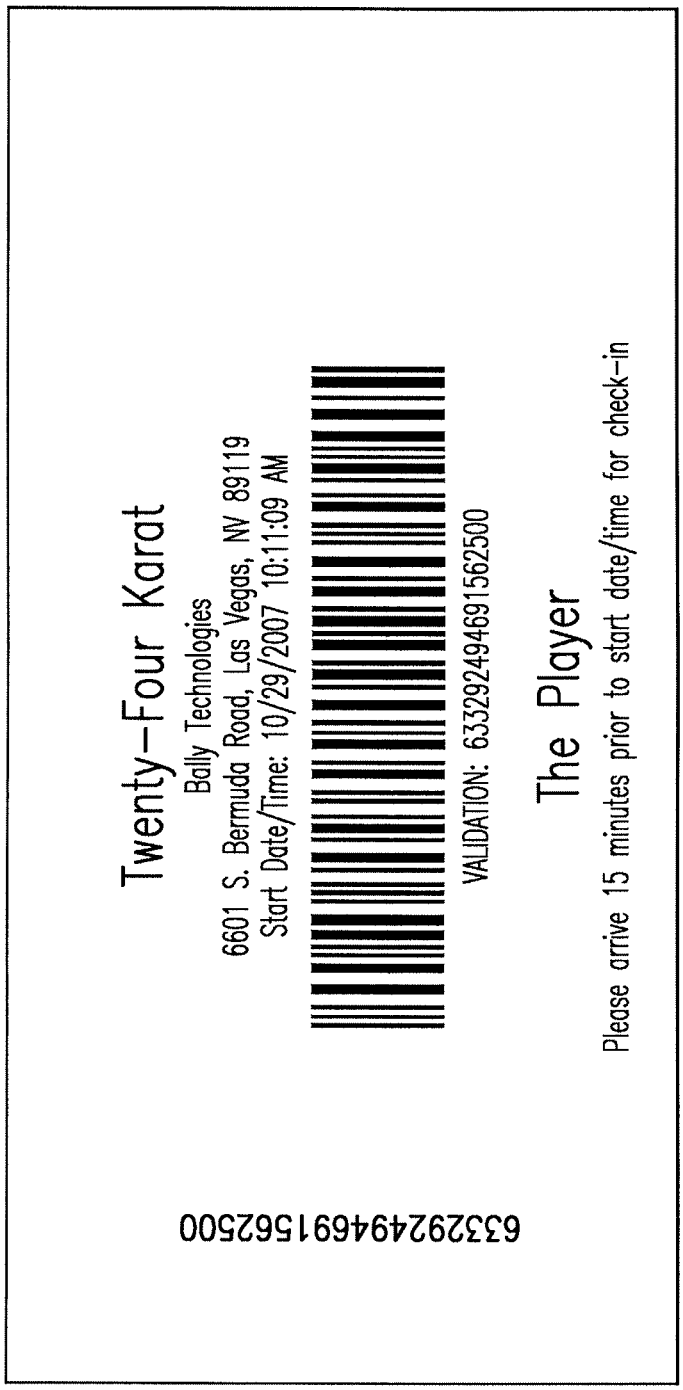

Twenty-Four Karat
Bally Technologies
6601 S. Bermuda Road, Las Vegas, NV 89119
Start Date/Time: 10/29/2007 10:11:09 AM
VALIDATION: 633292494691562500
The Player
Please arrive 15 minutes prior to start date/time for check-in
633292494691562500

FIG.75

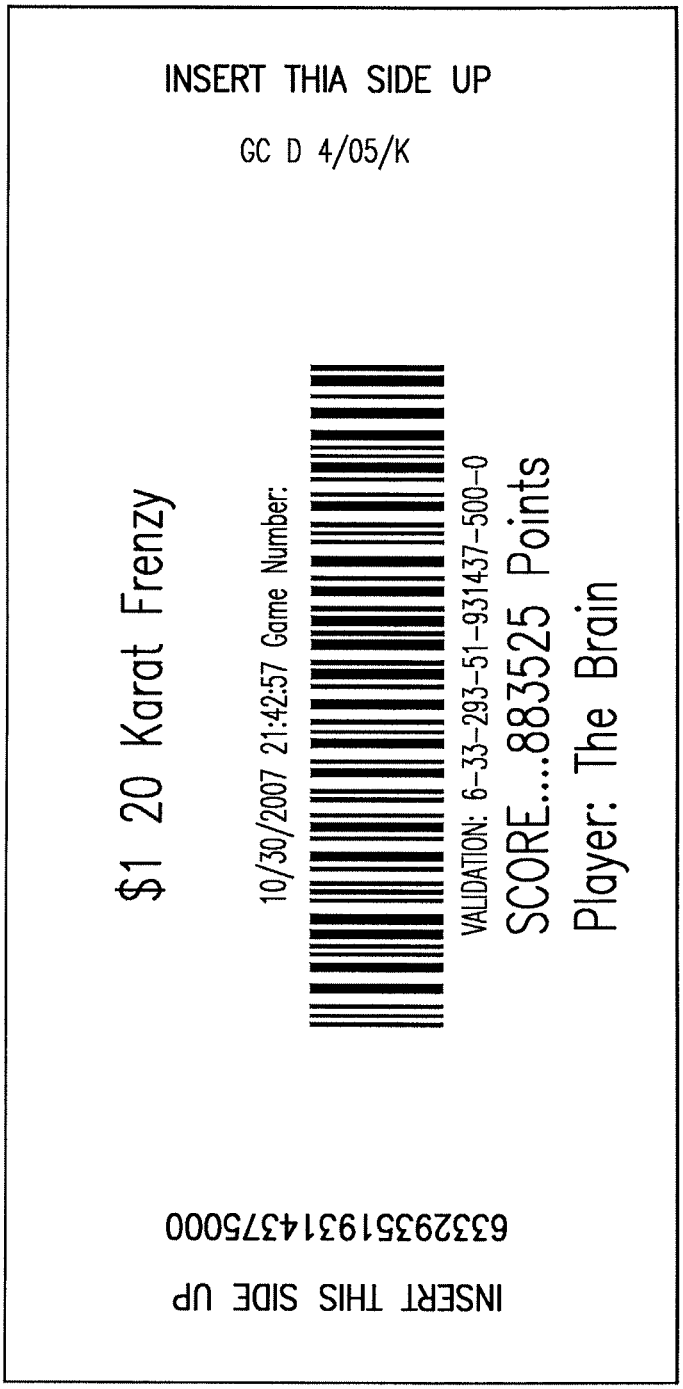

INSERT THIA SIDE UP
GC D 4/05/K
$1 20 Karat Frenzy
10/30/2007 21:42:57 Game Number:
VALIDATION: 6-33-293-51-931437-500-0
SCORE....883525 Points
Player: The Brain
6332935193143750000
INSERT THIS SIDE UP

FIG.76

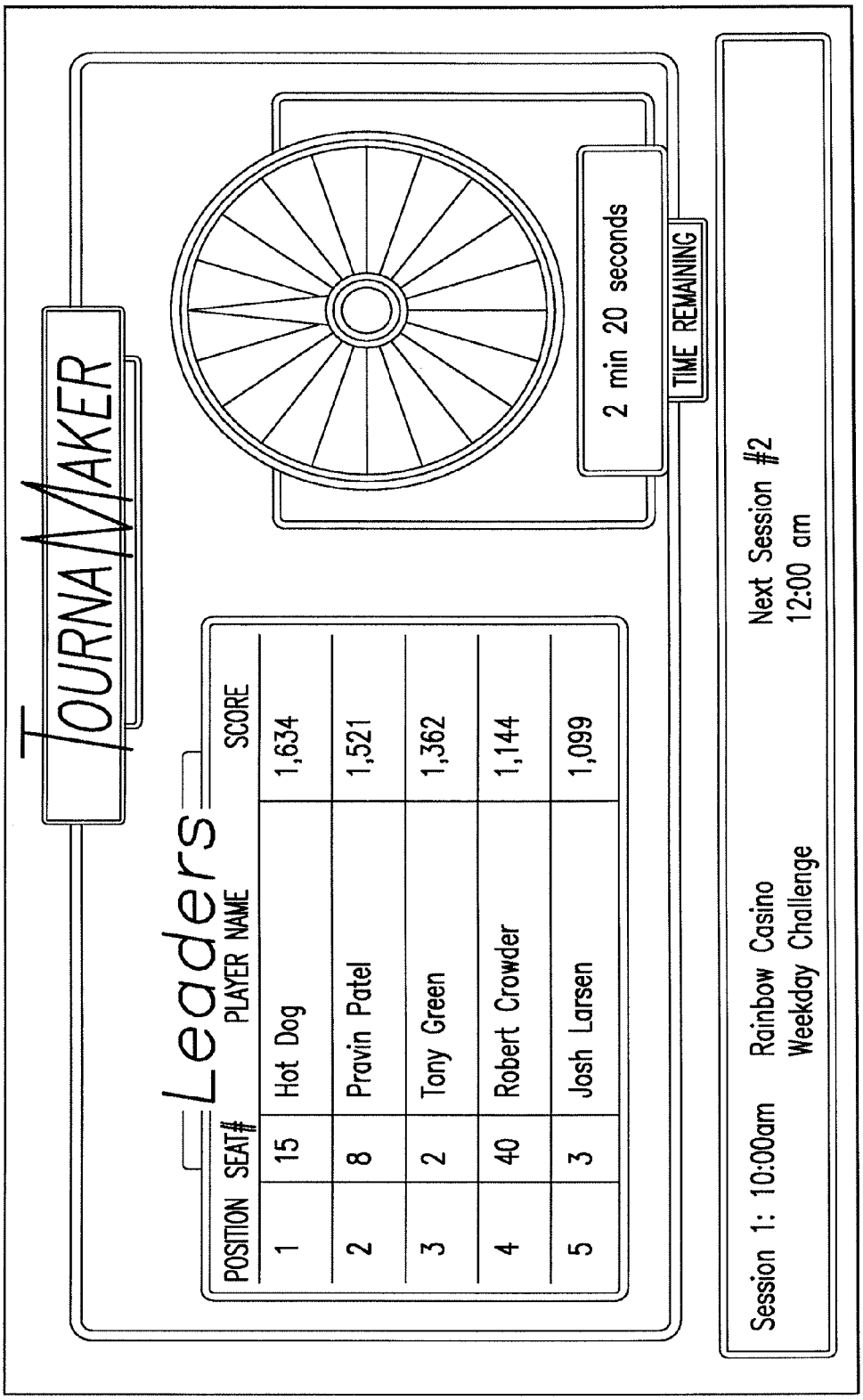

TOURNAMAKER
Leaders
POSITION SEAT# PLAYER NAME SCORE
1 15 Hot Dog 1,634
2 8 Pravin Patel 1,521
3 2 Tony Green 1,362
4 40 Robert Crowder 1,144
5 3 Josh Larsen 1,099
2 min 20 seconds
TIME REMAINING
Session 1: 10:00am Rainbow Casino
Weekday Challenge
Next Session #2
12:00 am

FIG. 77

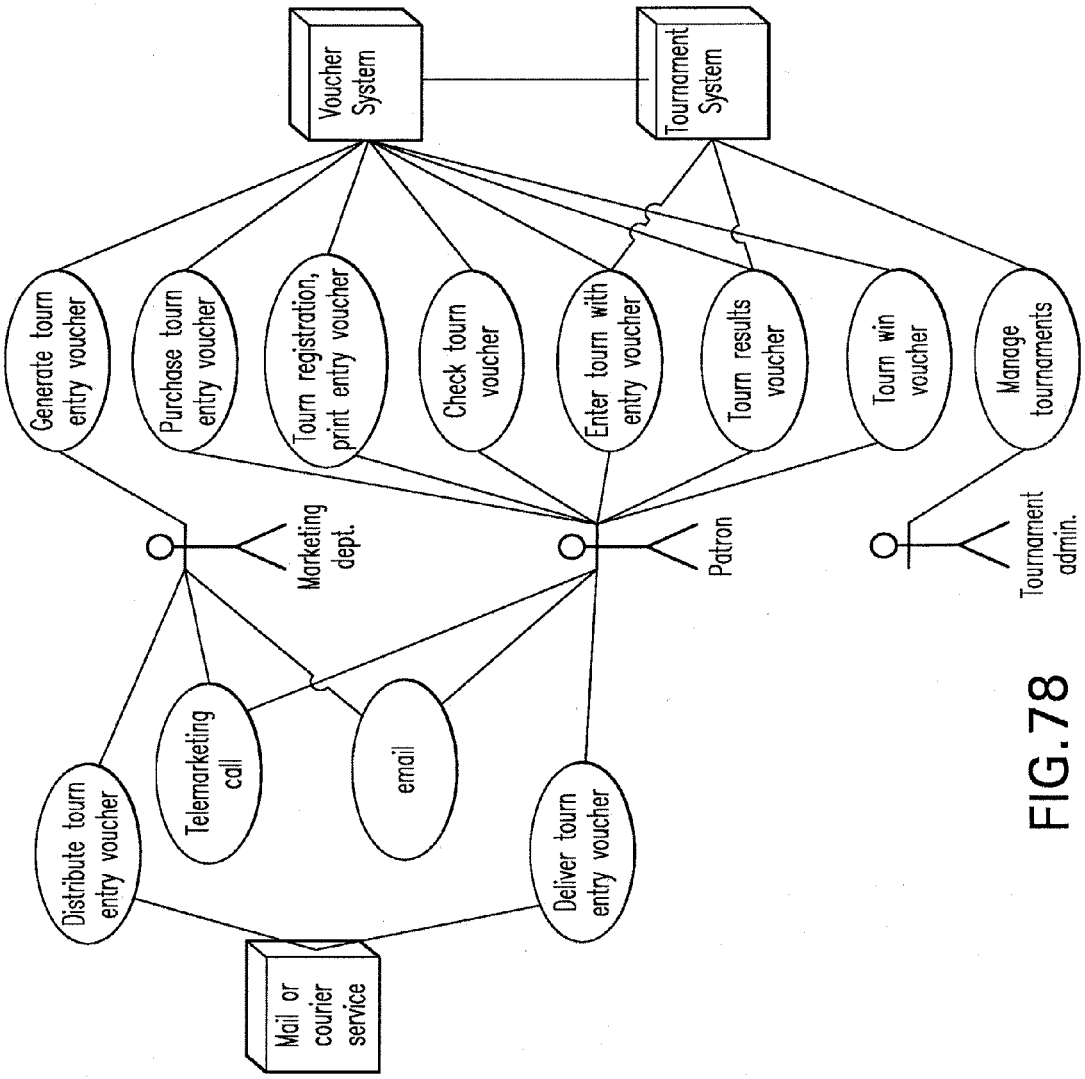

Voucher System
Tournament System
Generate tourn entry voucher
Purchase tourn entry voucher
Tourn registration, print entry voucher
Check tourn voucher
Enter tourn with entry voucher
Tourn results voucher
Tourn win voucher
Manage tournaments
Marketing dept.
Patron
Tournament admin.
Distribute tourn entry voucher
Telemarketing call
email
Deliver tourn entry voucher
Mail or courier service

FIG. 78

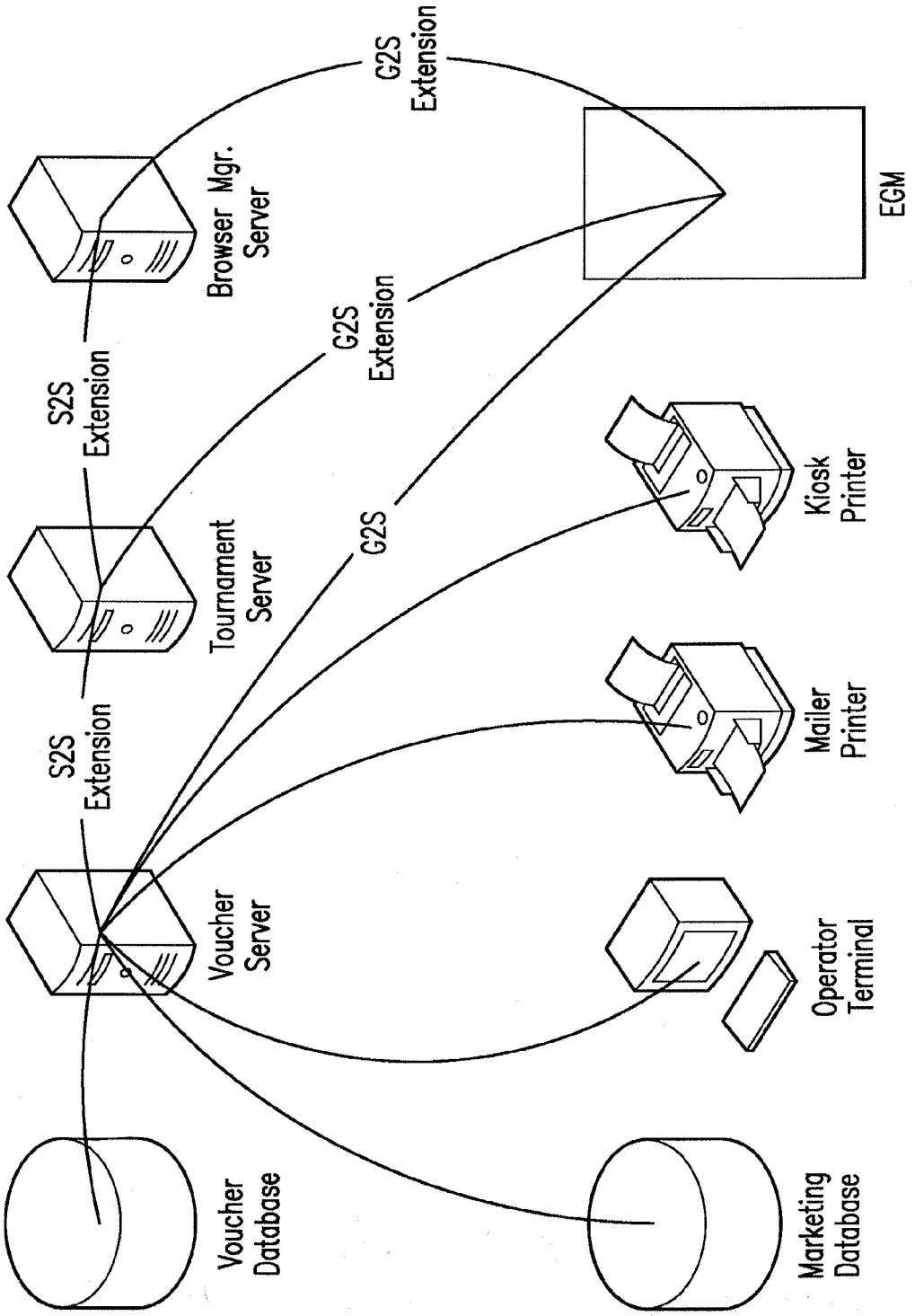

G2S Extension
Browser Mgr. Server
S2S Extension
G2S Extension
EGM
Tournament Server
G2S
Kiosk Printer
S2S Extension
Mailer Printer
Voucher Server
Operator Terminal
Voucher Database
Marketing Database

FIG. 79

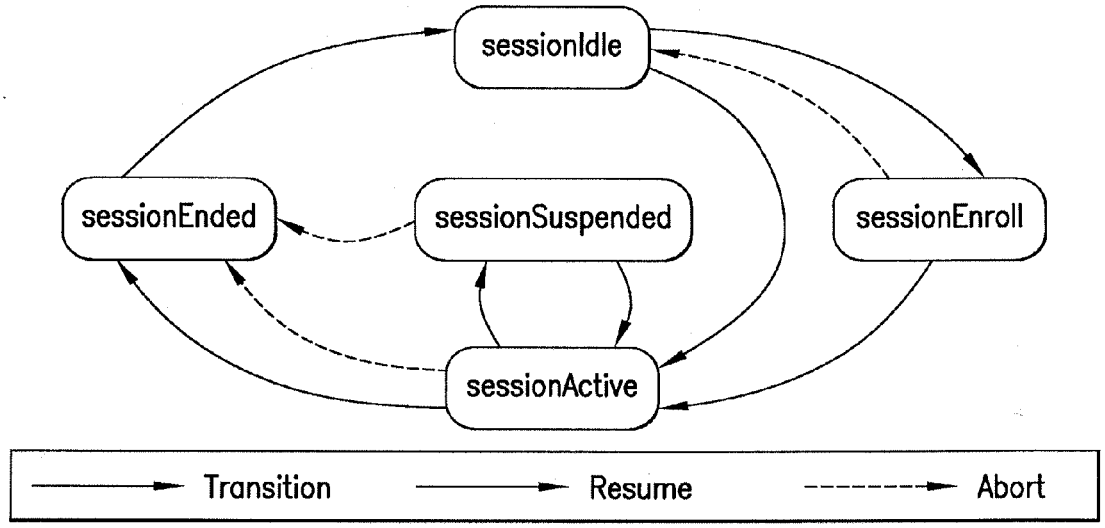

sessionIdle
sessionEnded
sessionSuspended
sessionEnroll
sessionActive
Transition
Resume
Abort

FIG.80

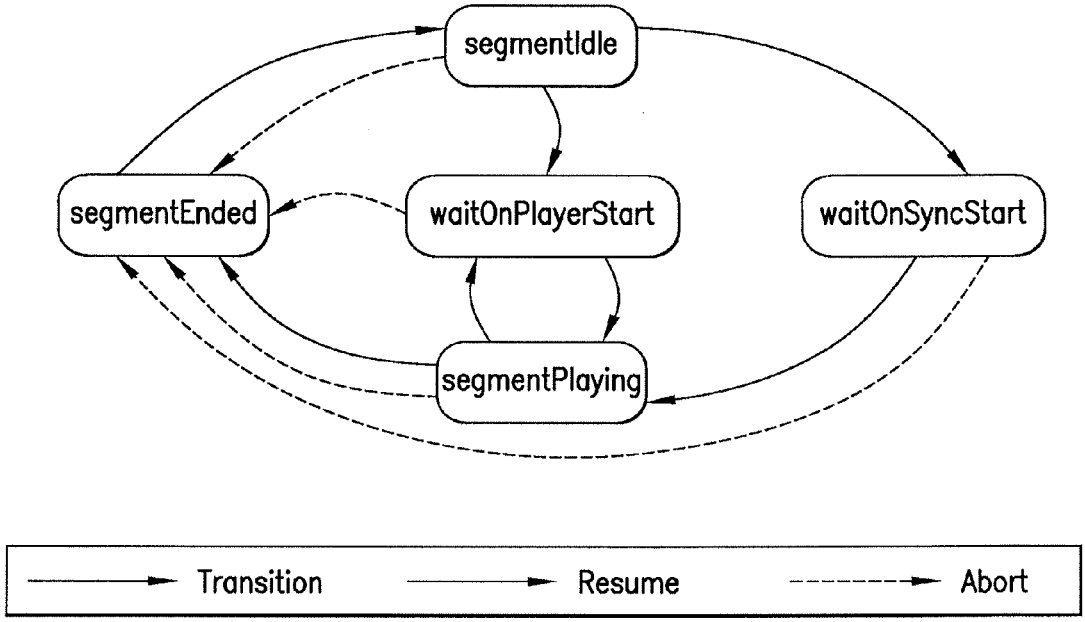

segmentIdle
segmentEnded
waitOnPlayerStart
waitOnSyncStart
segmentPlaying
Transition
Resume
Abort

FIG.81

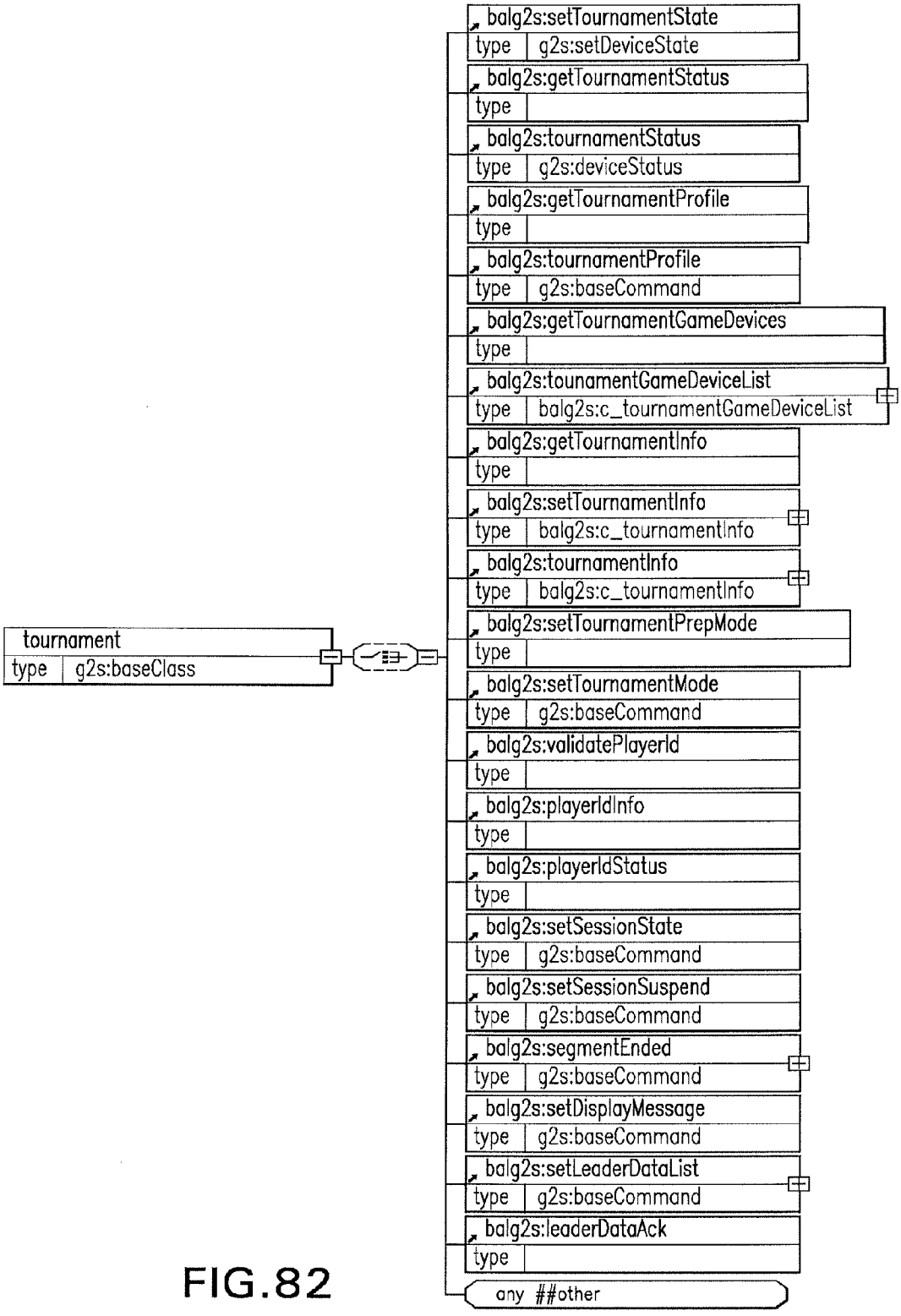

tournament
type g2s:baseClass
balg2s:setTournamentState
type g2s:setDeviceState
balg2s:getTournamentStatus
type
balg2s:tournamentStatus
type g2s:deviceStatus
balg2s:getTournamentProfile
type
balg2s:tournamentProfile
type g2s:baseCommand
balg2s:getTournamentGameDevices
type
balg2s:tounamentGameDeviceList
type balg2s:c_tournamentGameDeviceList
balg2s:getTournamentInfo
type
balg2s:setTournamentInfo
type balg2s:c_tournamentInfo
balg2s:tournamentInfo
type balg2s:c_tournamentInfo
balg2s:setTournamentPrepMode
type
balg2s:setTournamentMode
type g2s:baseCommand
balg2s:validatePlayerId
type
balg2s:playerIdInfo
type
balg2s:playerIdStatus
type
balg2s:setSessionState
type g2s:baseCommand
balg2s:setSessionSuspend
type g2s:baseCommand
balg2s:segmentEnded
type g2s:baseCommand
balg2s:setDisplayMessage
type g2s:baseCommand
balg2s:setLeaderDataList
type g2s:baseCommand
balg2s:leaderDataAck
type
any ##other

FIG.82

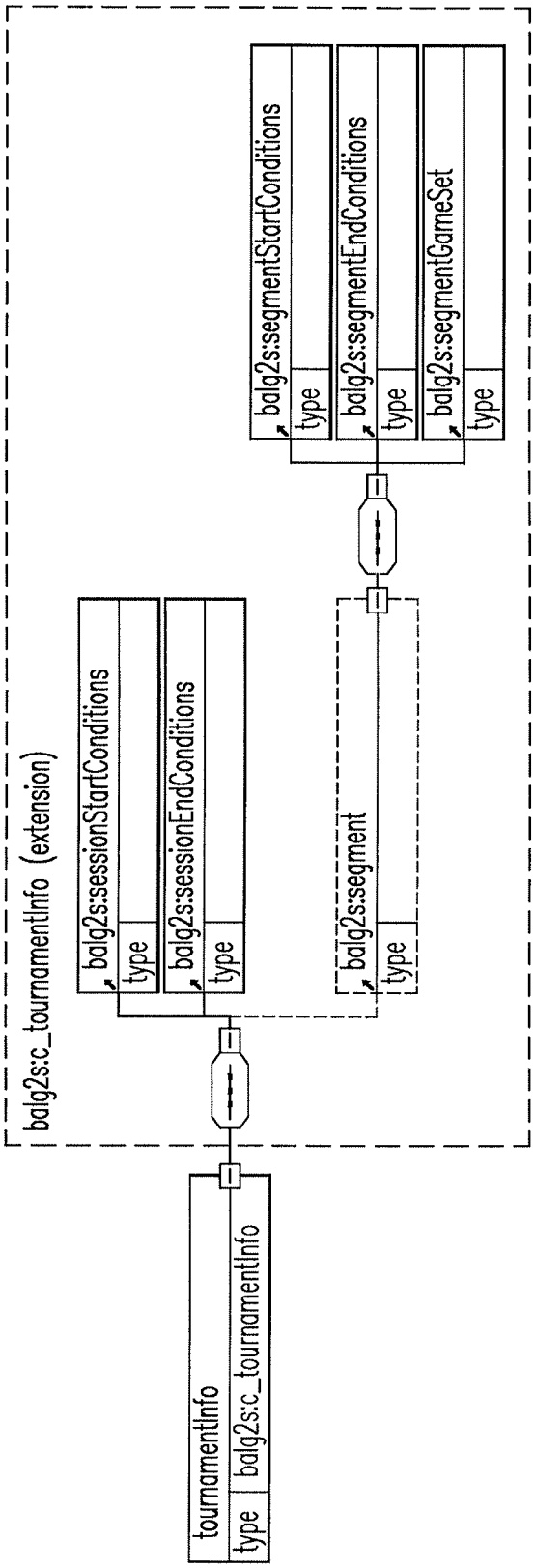

tournamentInfo
type
balg2s:c_tournamentInfo
balg2s:c_tournamentInfo (extension)
balg2s:sessionStartConditions
type
balg2s:sessionEndConditions
type
balg2s:segment
type
balg2s:segmentStartConditions
type
balg2s:segmentEndConditions
type
balg2s:segmentGameSet
type

FIG.83

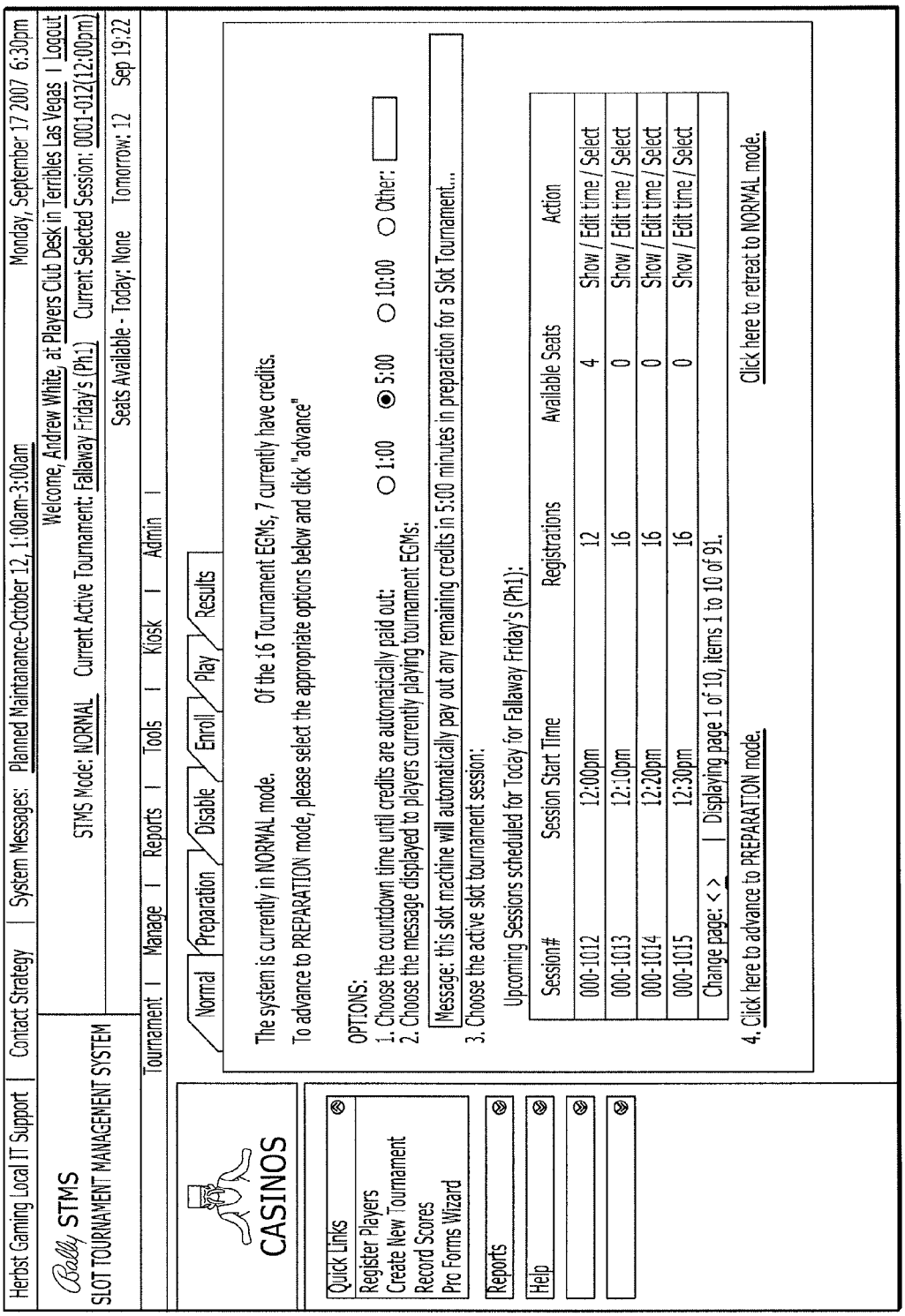

Herbst Gaming Local IT Support | Contact Strategy | System Messages: Planned Maintanance-October 12, 1:00am-3:00am Monday, September 17 2007 6:30pm
Bally STMS
SLOT TOURNAMENT MANAGEMENT SYSTEM
Welcome, Andrew White, at: Players Club Desk in Terribles Las Vegas | Logout
STMS Mode: NORMAL Current Active Tournament: Fallaway Friday's (Ph1) Current Selected Session: 0001-012(12:00pm)
Seats Available - Today: None Tomorrow: 12 Sep 19:22
Tournament | Manage | Reports | Tools | Kiosk | Admin |
CASINOS
Normal Preparation Disable Enroll Play Results
The system is currently in NORMAL mode. Of the 16 Tournament EGMs, 7 currently have credits.
To advance to PREPARATION mode, please select the appropriate options below and click "advance"
OPTIONS:
1. Choose the countdown time until credits are automatically paid out: 1:00 5:00 10:00 Other:
2. Choose the message displayed to players currently playing tournament EGMs:
Message: this slot machine will automatically pay out any remaining credits in 5:00 minutes in preparation for a Slot Tournament...
3. Choose the active slot tournament session:
Upcoming Sessions scheduled for Today for Fallaway Friday's (Ph1):
Session# Session Start Time Registrations Available Seats Action
000-1012 12:00pm 12 4 Show / Edit time / Select
000-1013 12:10pm 16 0 Show / Edit time / Select
000-1014 12:20pm 16 0 Show / Edit time / Select
000-1015 12:30pm 16 0 Show / Edit time / Select
Change page: < > | Displaying page 1 of 10, items 1 to 10 of 91.
4. Click here to advance to PREPARATION mode.
Click here to retreat to NORMAL mode.
Quick Links
Register Players
Create New Tournament
Record Scores
Pro Forms Wizard
Reports
Help

FIG. 84

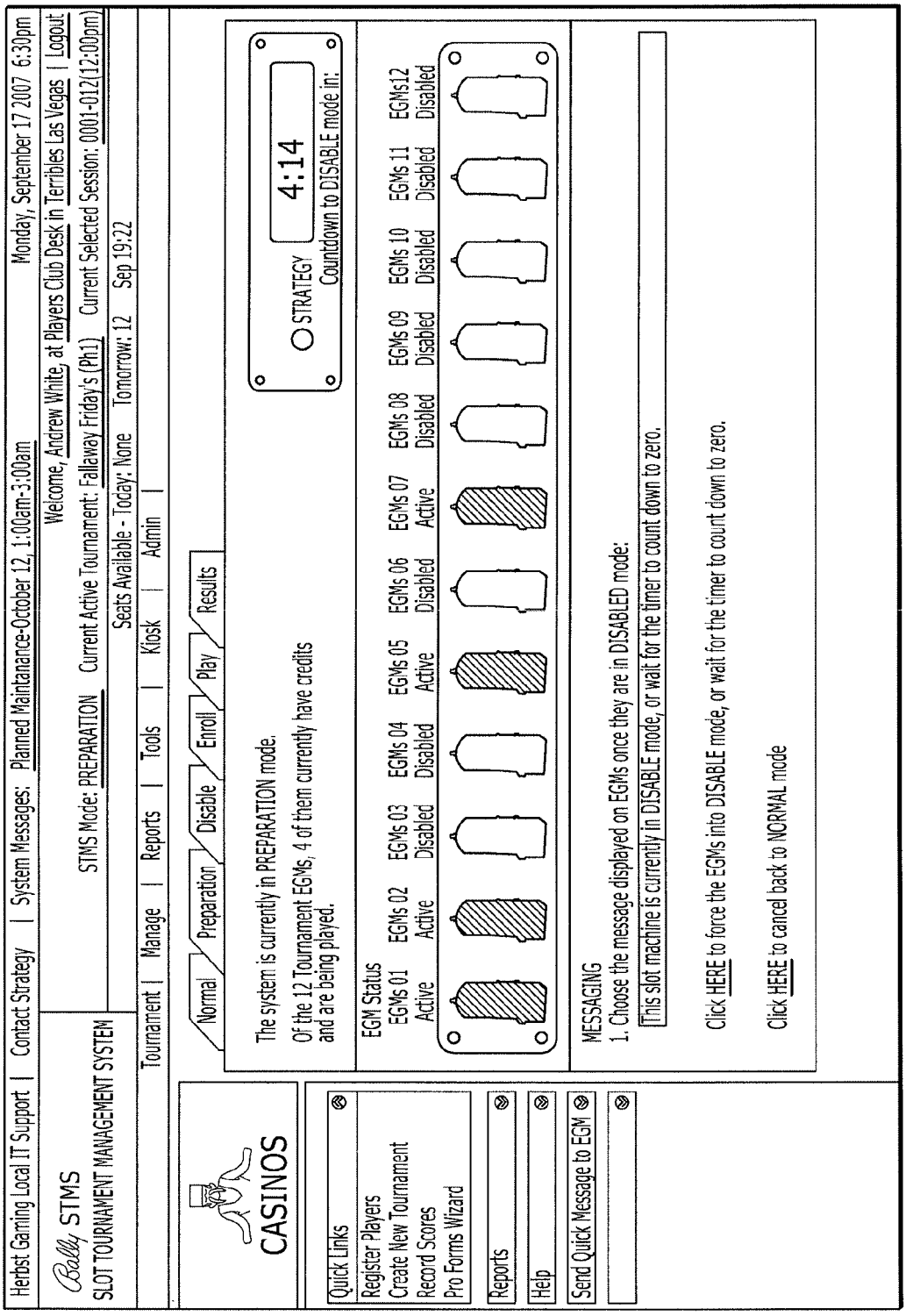

Herbst Gaming Local IT Support | Contact Strategy | System Messages: Planned Maintanance-October 12, 1:00am-3:00am Monday, September 17 2007 6:30pm
Welcome, Andrew White, at Players Club Desk in Terribles Las Vegas | Logout
Bally STMS
SLOT TOURNAMENT MANAGEMENT SYSTEM
STMS Mode: PREPARATION Current Active Tournament: Fallaway Friday's (Ph1) Current Selected Session: 0001-012(12:00pm)
Seats Available - Today: None Tomorrow: 12 Sep 19:22
Tournament | Manage | Reports | Tools | Kiosk | Admin |
CASINOS
Normal Preparation Disable Enroll Play Results
The system is currently in PREPARATION mode.
Of the 12 Tournament EGMs, 4 of them currently have credits and are being played.
STRATEGY 4:14
Countdown to DISABLE mode in:
EGM Status
EGMs 01 Active
EGMs 02 Active
EGMs 03 Disabled
EGMs 04 Disabled
EGMs 05 Active
EGMs 06 Disabled
EGMs 07 Active
EGMs 08 Disabled
EGMs 09 Disabled
EGMs 10 Disabled
EGMs 11 Disabled
EGMs12 Disabled
MESSAGING
1. Choose the message displayed on EGMs once they are in DISABLED mode:
This slot machine is currently in DISABLE mode, or wait for the timer to count down to zero.
Click HERE to force the EGMs into DISABLE mode, or wait for the timer to count down to zero.
Click HERE to cancel back to NORMAL mode
Quick Links
Register Players
Create New Tournament
Record Scores
Pro Forms Wizard
Reports
Help
Send Quick Message to EGM

FIG. 85

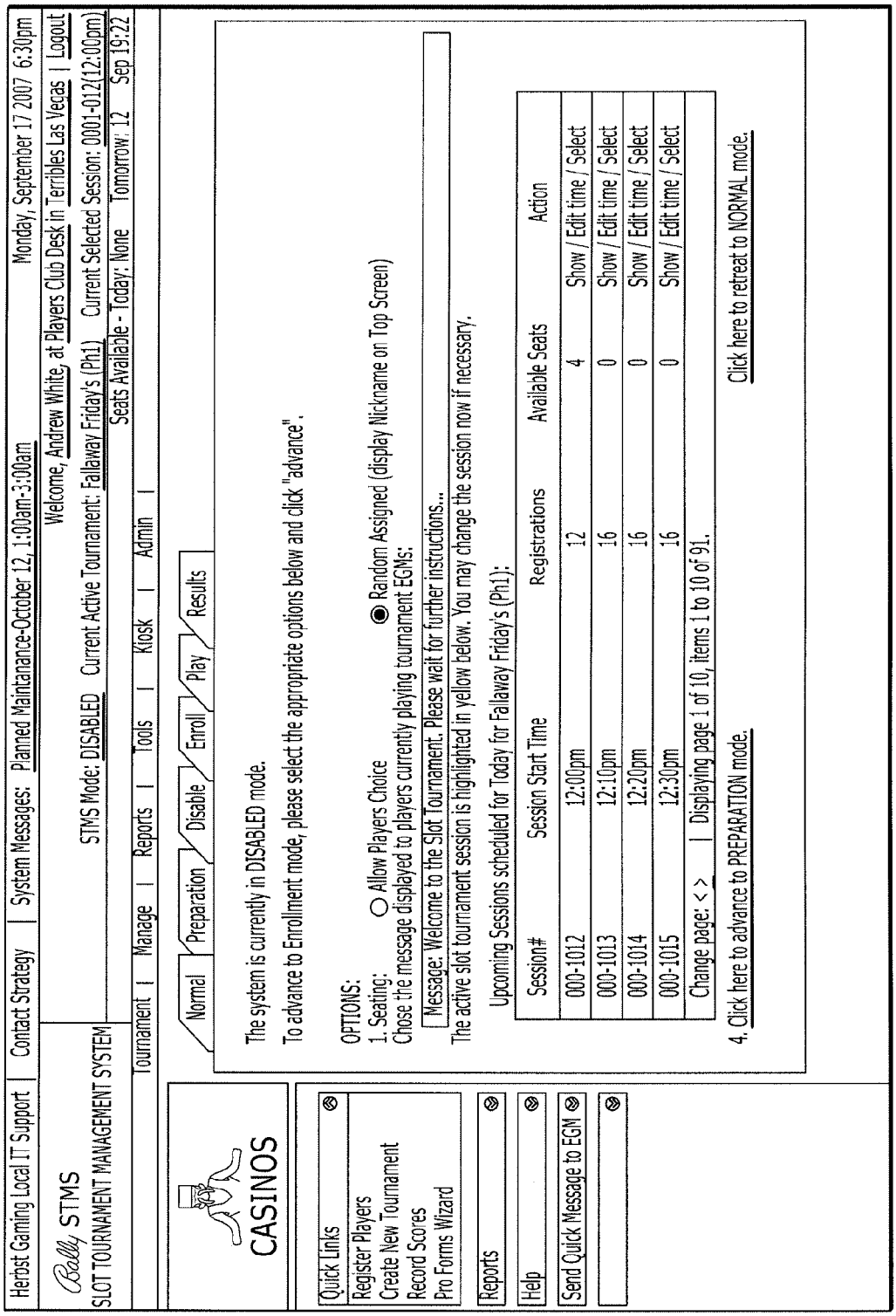

Herbst Gaming Local IT Support | Contact Strategy | System Messages: Planned Maintanance-October 12, 1:00am-3:00am
Monday, September 17 2007 6:30pm
Welcome, Andrew White, at Players Club Desk in Terribles Las Vegas | Logout
Bally STMS
SLOT TOURNAMENT MANAGEMENT SYSTEM
STMS Mode: DISABLED Current Active Tournament: Fallaway Friday's (Ph1) Current Selected Session: 0001-012(12:00pm)
Seats Available - Today: None Tomorrow: 12 Sep 19:22
Tournament | Manage | Reports | Tools | Kiosk | Admin |
CASINOS
Normal Preparation Disable Enroll Play Results
The system is currently in DISABLED mode.
To advance to Enrollment mode, please select the appropriate options below and click "advance".
OPTIONS:
1. Seating: ○ Allow Players Choice ◉ Random Assigned (display Nickname on Top Screen)
Chose the message displayed to players currently playing tournament EGMs:
Message: Welcome to the Slot Tournament. Please wait for further instructions...
The active slot tournament session is highlighted in yellow below. You may change the session now if necessary.
Upcoming Sessions scheduled for Today for Fallaway Friday's (Ph1):
Session# Session Start Time Registrations Available Seats Action
000-1012 12:00pm 12 4 Show / Edit time / Select
000-1013 12:10pm 16 0 Show / Edit time / Select
000-1014 12:20pm 16 0 Show / Edit time / Select
000-1015 12:30pm 16 0 Show / Edit time / Select
Change page: < > | Displaying page 1 of 10, items 1 to 10 of 91.
4. Click here to advance to PREPARATION mode.
Click here to retreat to NORMAL mode.
Quick Links
Register Players
Create New Tournament
Record Scores
Pro Forms Wizard
Reports
Help
Send Quick Message to EGM

FIG. 86

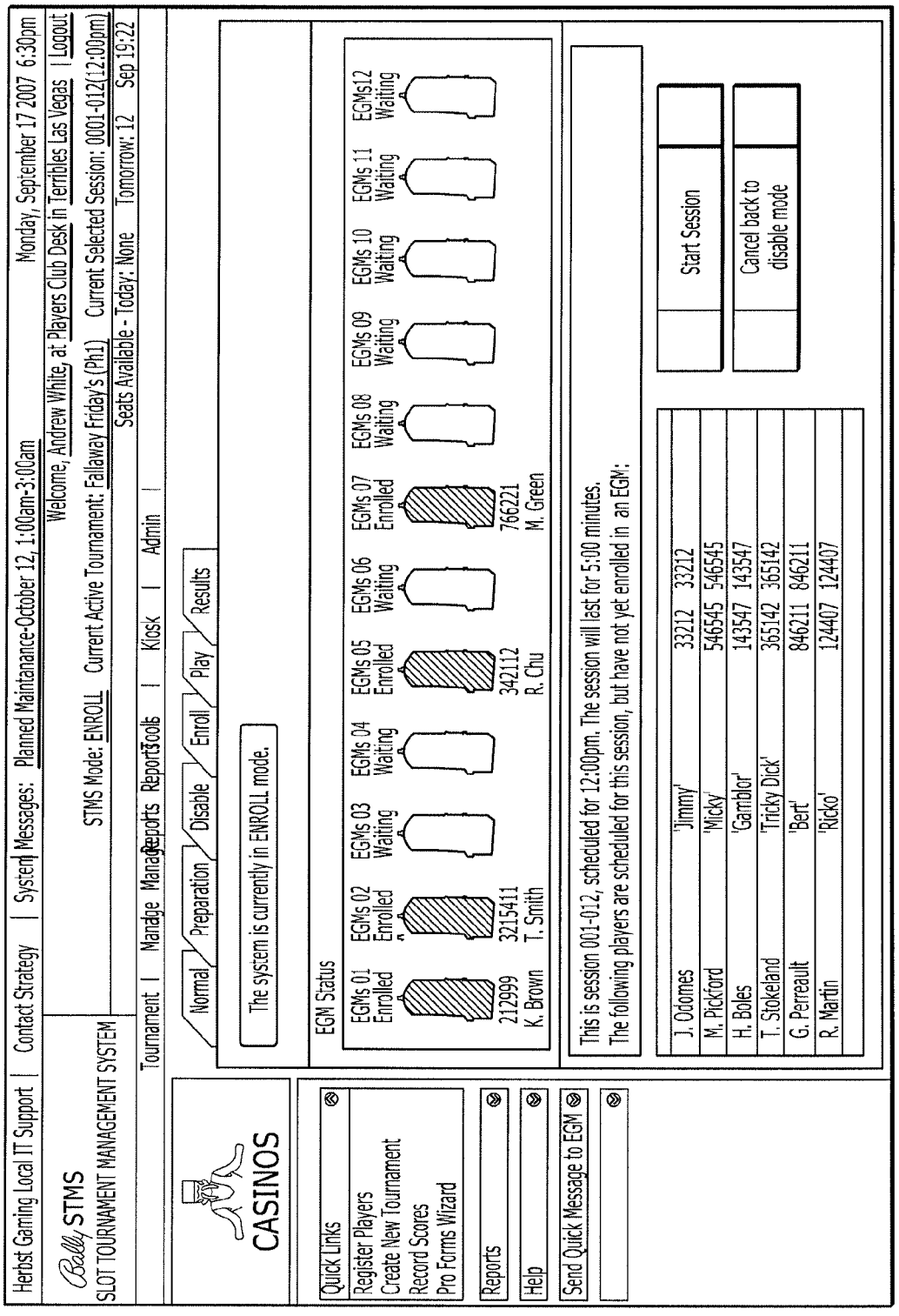

Herbst Gaming Local IT Support | Contact Strategy | System Messages: Planned Maintanance-October 12, 1:00am-3:00am
Monday, September 17 2007 6:30pm
Welcome, Andrew White, at Players Club Desk in Terribles Las Vegas | Logout
Bally STMS
SLOT TOURNAMENT MANAGEMENT SYSTEM
STMS Mode: ENROLL Current Active Tournament: Fallaway Friday's (Ph1) Current Selected Session: 0001-012(12:00pm)
Seats Available - Today: None Tomorrow: 12 Sep 19:22
Tournament | Manage | Manage Reports | Reports | Tools | Kiosk | Admin |
CASINOS
Normal Preparation Disable Enroll Play Results
The system is currently in ENROLL mode.
EGM Status
EGMs 01 Enrolled 212999 K. Brown
EGMs 02 Enrolled 3215411 T. Smith
EGMs 03 Waiting
EGMs 04 Waiting
EGMs 05 Enrolled 342112 R. Chu
EGMs 06 Waiting
EGMs 07 Enrolled 766221 M. Green
EGMs 08 Waiting
EGMs 09 Waiting
EGMs 10 Waiting
EGMs 11 Waiting
EGMs12 Waiting
Quick Links
Register Players
Create New Tournament
Record Scores
Pro Forms Wizard
Reports
Help
Send Quick Message to EGM
This is session 001-012, scheduled for 12:00pm. The session will last for 5:00 minutes.
The following players are scheduled for this session, but have not yet enrolled in an EGM:
J. Odomes 'Jimmy' 33212 33212
M. Pickford 'Micky' 546545 546545
H. Boles 'Gambler' 143547 143547
T. Stokeland 'Tricky Dick' 365142 365142
G. Perreault 'Bert' 846211 846211
R. Martin 'Ricko' 124407 124407
Start Session
Cancel back to disable mode

FIG. 87

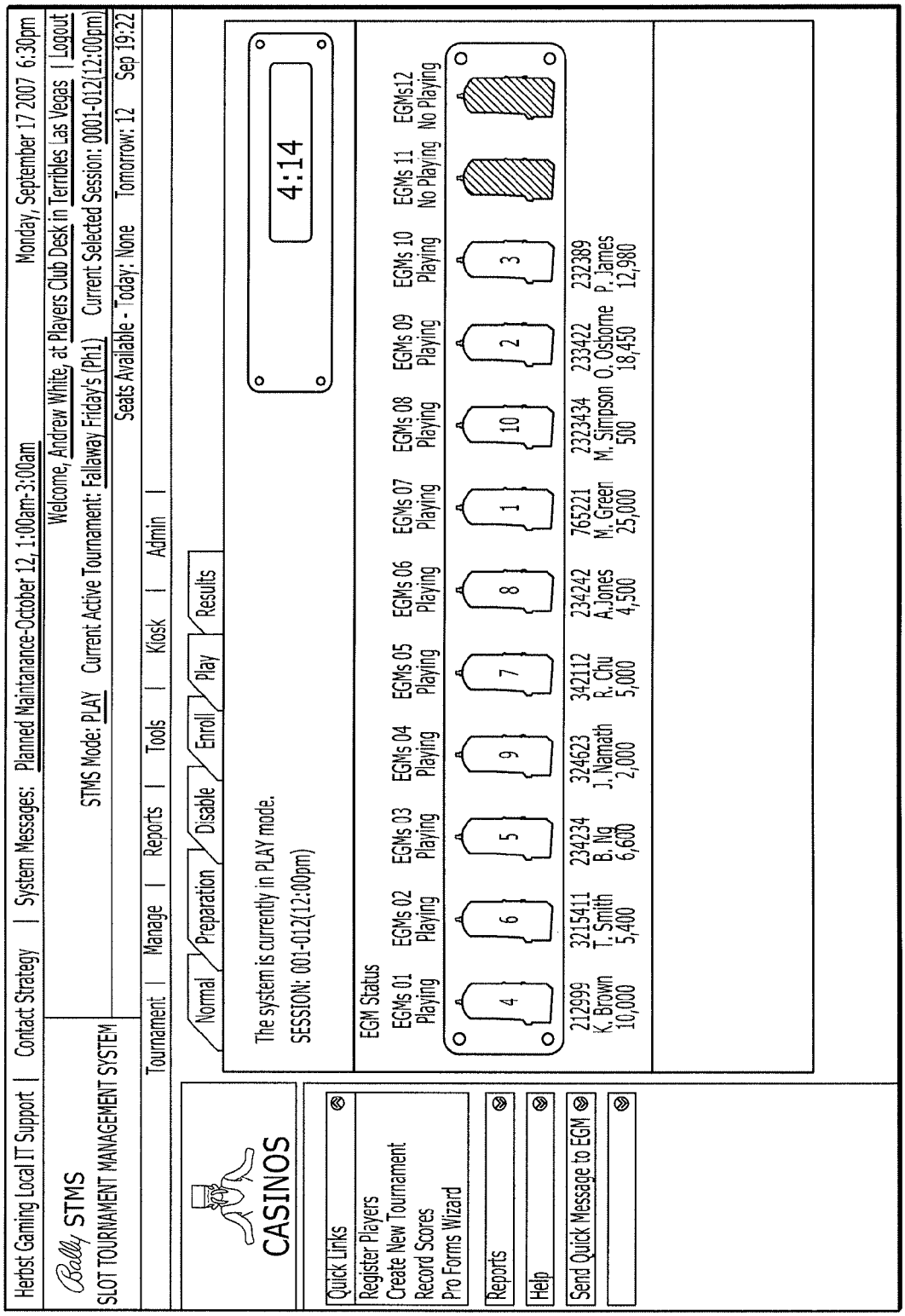

Herbst Gaming Local IT Support | Contact Strategy | System Messages: Planned Maintanance-October 12, 1:00am-3:00am
Monday, September 17 2007 6:30pm
Welcome, Andrew White, at Players Club Desk in Terribles Las Vegas | Logout
Bally STMS
SLOT TOURNAMENT MANAGEMENT SYSTEM
STMS Mode: PLAY Current Active Tournament: Fallaway Friday's (Ph1) Current Selected Session: 0001-012(12:00pm)
Seats Available - Today: None Tomorrow: 12 Sep 19:22
Tournament | Manage | Reports | Tools | Kiosk | Admin |
CASINOS
Normal Preparation Disable Enroll Play Results
The system is currently in PLAY mode.
SESSION: 001-012(12:00pm)
4:14
Quick Links
Register Players
Create New Tournament
Record Scores
Pro Forms Wizard
Reports
Help
Send Quick Message to EGM
EGM Status
EGMs 01 Playing
EGMs 02 Playing
EGMs 03 Playing
EGMs 04 Playing
EGMs 05 Playing
EGMs 06 Playing
EGMs 07 Playing
EGMs 08 Playing
EGMs 09 Playing
EGMs 10 Playing
EGMs 11 No Playing
EGMs12 No Playing
4
6
5
9
7
8
1
10
2
3
212999 K. Brown 10,000
3215411 T. Smith 5,400
234234 B. Ng 6,600
324623 J. Namath 2,000
342112 R. Chu 5,000
234242 A.Jones 4,500
765221 M. Green 25,000
2323434 M. Simpson 500
233422 O. Osborne 18,450
232389 P. James 12,980

FIG. 88

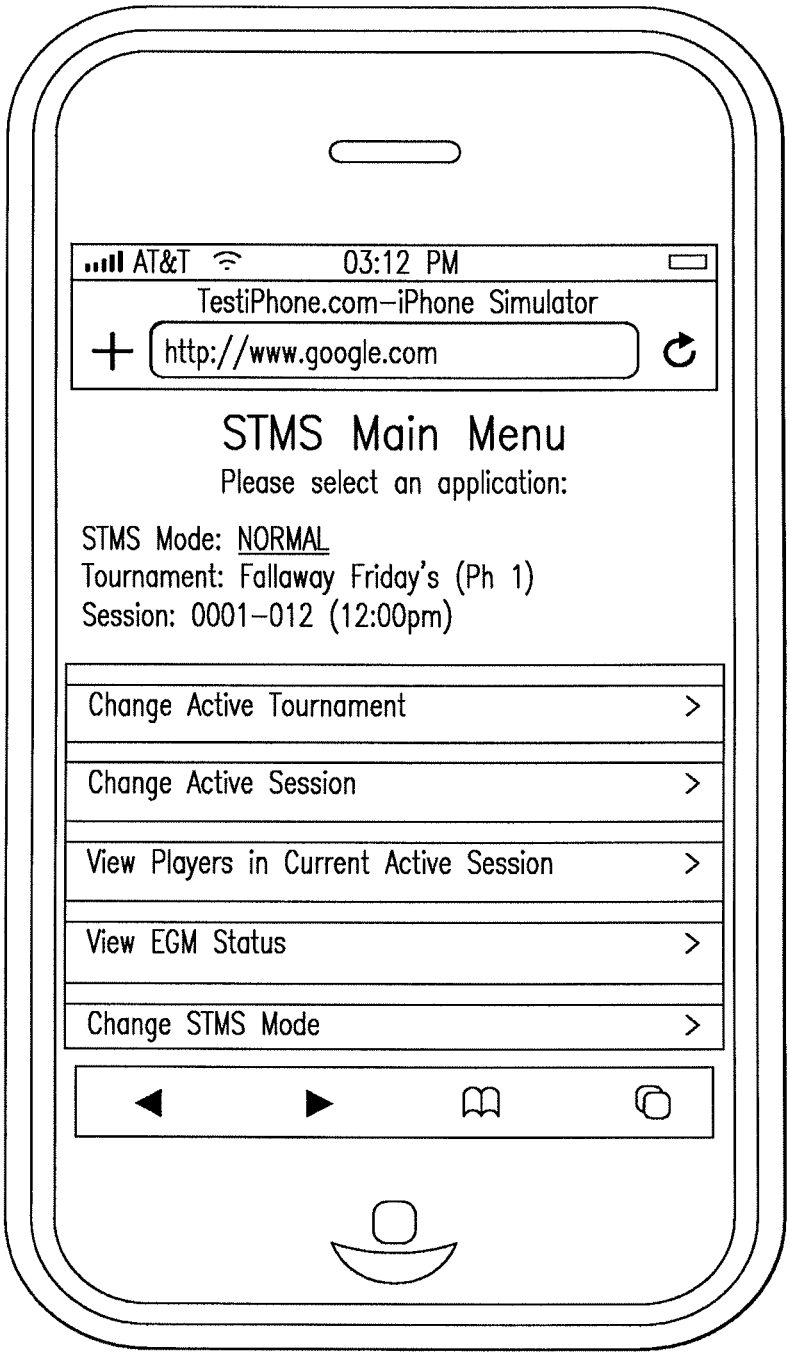

AT&T
03:12 PM
TestiPhone.com–iPhone Simulator
http://www.google.com
STMS Main Menu
Please select an application:
STMS Mode: NORMAL
Tournament: Fallaway Friday's (Ph 1)
Session: 0001–012 (12:00pm)
Change Active Tournament >
Change Active Session >
View Players in Current Active Session >
View EGM Status >
Change STMS Mode >

FIG.89

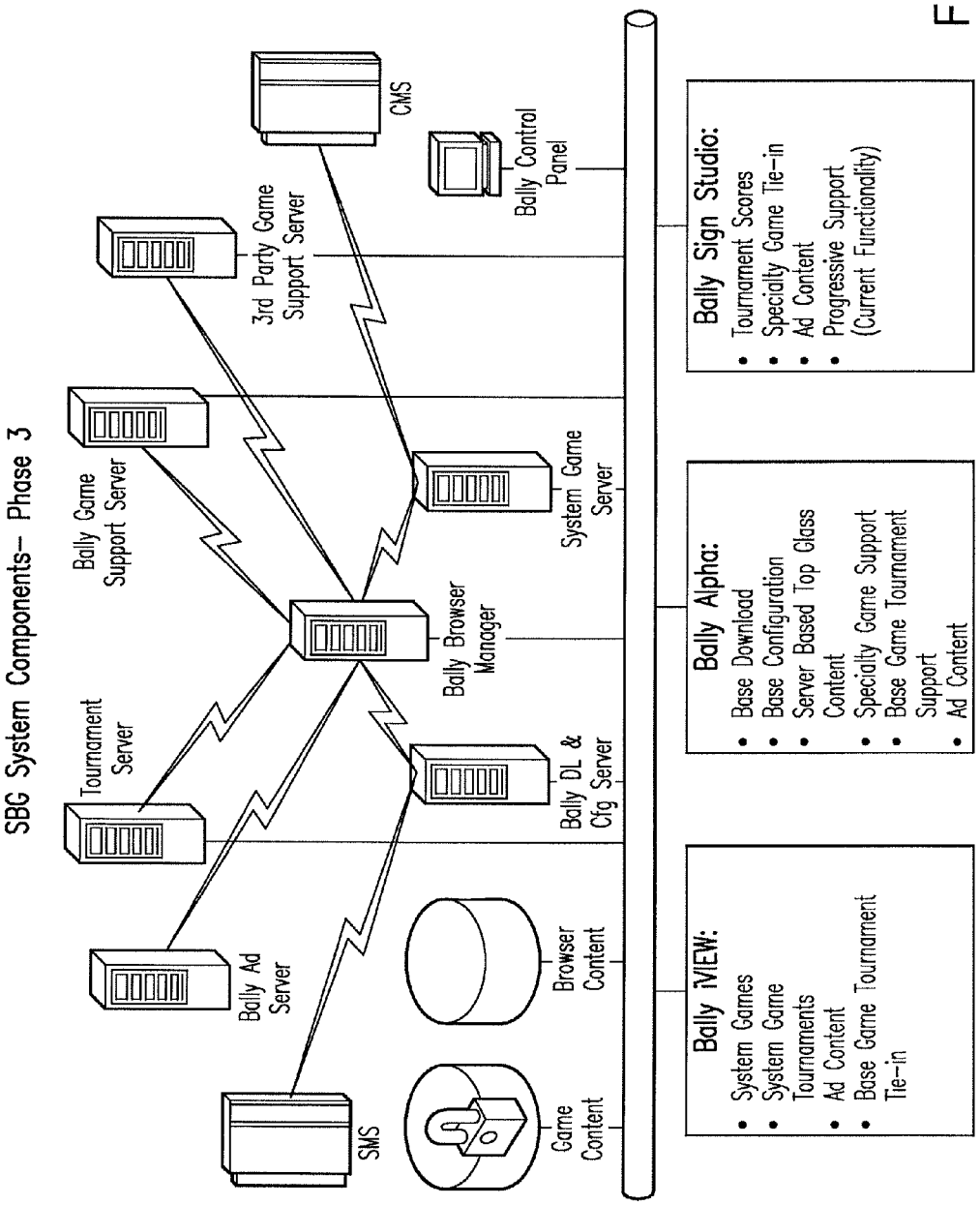

SBG System Components– Phase 3
CMS
Bally Control Panel
3rd Party Game Support Server
Bally Game Support Server
System Game Server
Tournament Server
Bally Browser Manager
Bally DL & Cfg Server
Bally Ad Server
Browser Content
SMS
Game Content
Bally iVIEW:
System Games
System Game Tournaments
Ad Content
Base Game Tournament Tie-in
Bally Alpha:
Base Download
Base Configuration
Server Based Top Glass Content
Specialty Game Support
Base Game Tournament Support
Ad Content
Bally Sign Studio:
Tournament Scores
Specialty Game Tie-in
Ad Content
Progressive Support (Current Functionality)

FIG.90

FIG. 91

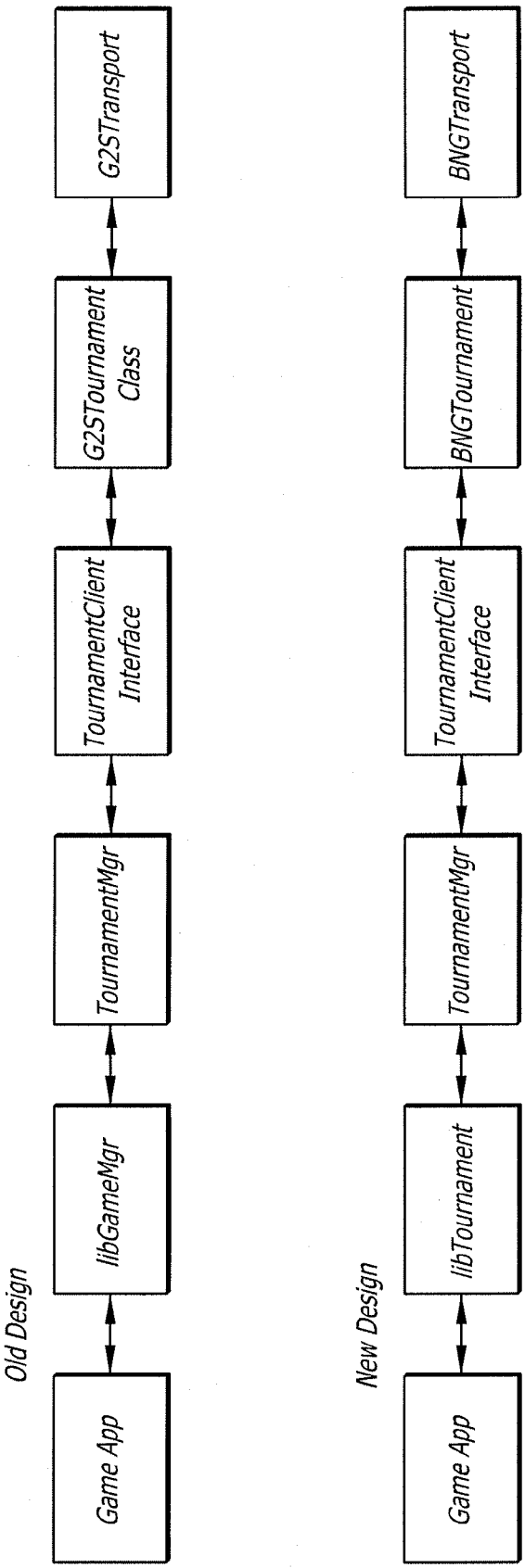
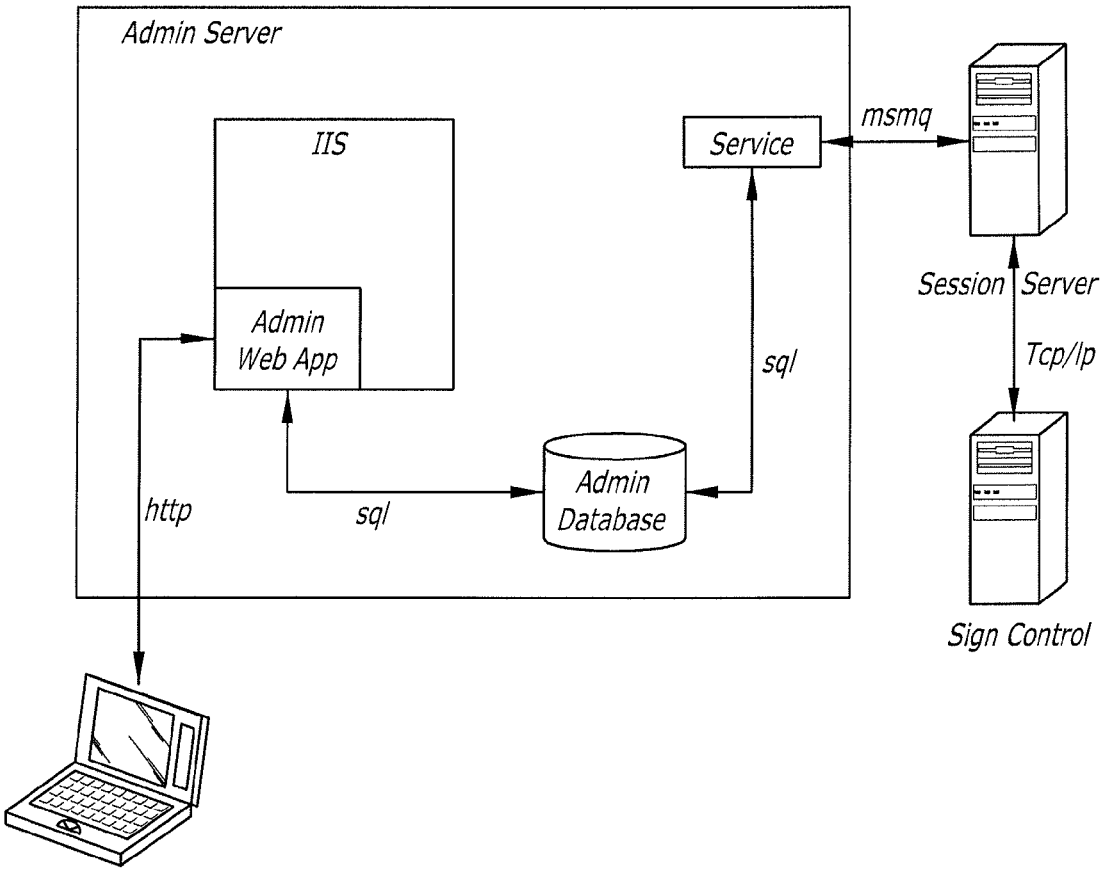

Old Design
Game App
libGameMgr
TournamentMgr
TournamentClient Interface
G2STournament Class
G2STransport
New Design
Game App
libTournament
TournamentMgr
TournamentClient Interface
BNGTournament
BNGTransport

FIG. 92


Admin Server
IIS
Admin Web App
Service
msmq
Session Server
Tcp/Ip
sql
Admin Database
http
sql
Sign Control

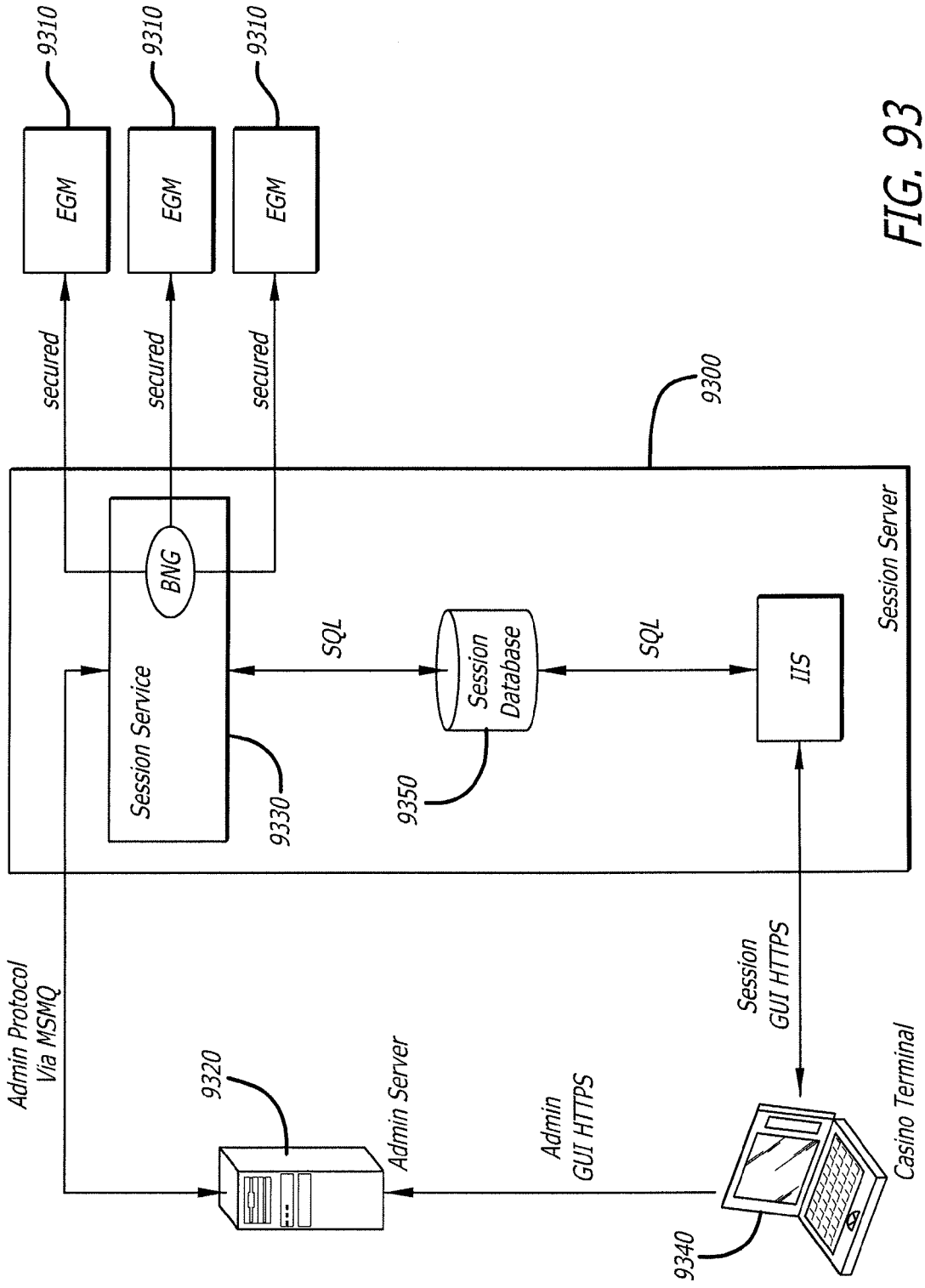

9310
9310
9310
EGM
EGM
EGM
secured
secured
secured
9300
BNG
Session Service
SQL
Session Database
SQL
IIS
Session Server
9330
9350
Admin Protocol Via MSMQ
9320
Admin Server
Admin GUI HTTPS
Session GUI HTTPS
Casino Terminal
9340

FIG. 93

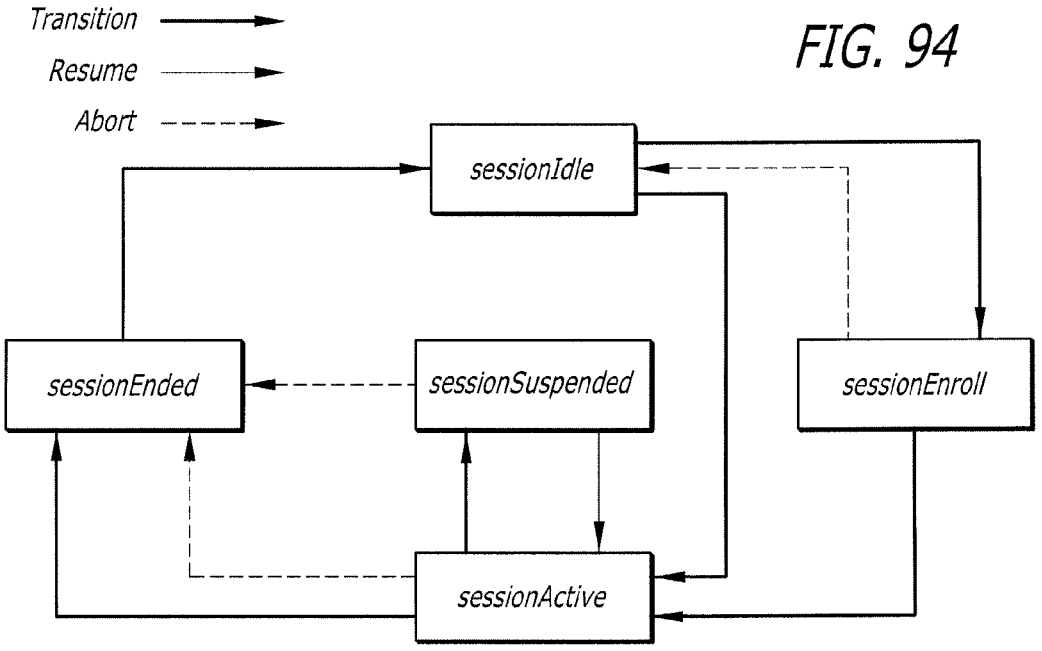

Transition
Resume
Abort
sessionIdle
sessionEnded
sessionSuspended
sessionEnroll
sessionActive

FIG. 94

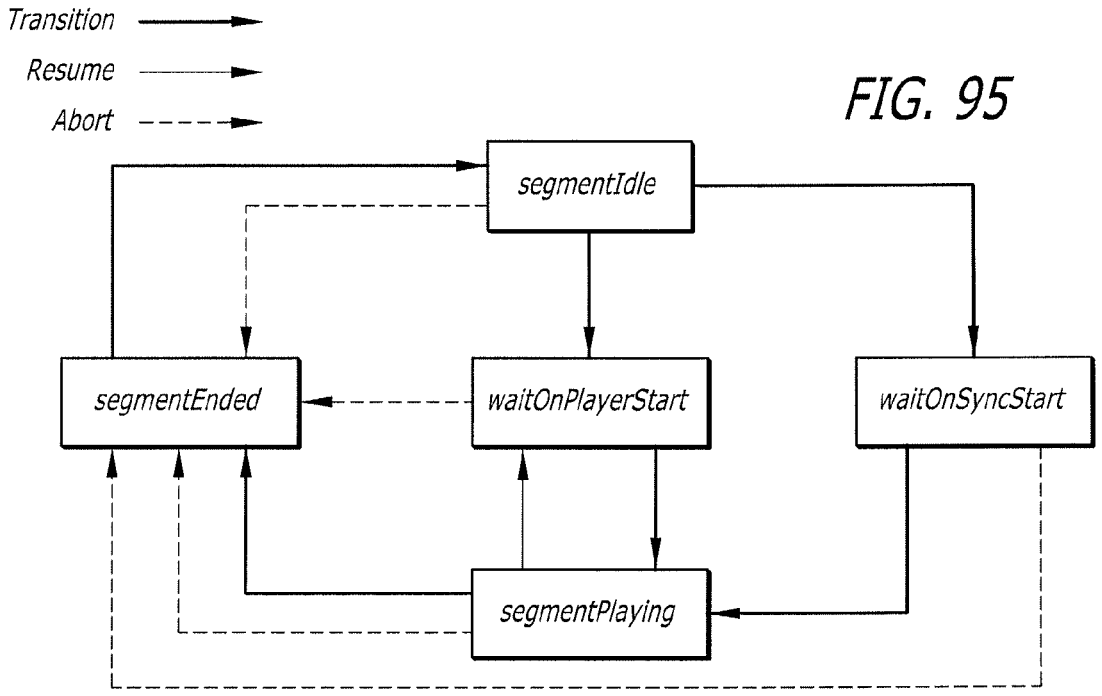

Transition
Resume
Abort
segmentIdle
segmentEnded
waitOnPlayerStart
waitOnSyncStart
segmentPlaying

FIG. 95

TOURNAMENT GAMING SYSTEMS AND ADMINISTRATION SERVER

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of U.S. patent application Ser. No. 12/268,288 filed Nov. 10, 2008, which claims the benefit of U.S. Provisional Application No. 60/987,062, filed Nov. 10, 2007, both of which are incorporated by reference in their entirety.

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BACKGROUND

Tournaments are often arranged at a casino to create an exciting activity to drive attendance and revenue for the casino. A tournament is a group function wherein several players pay a set amount of money to join a tournament. These entry fees are usually manually collected from the players and typically are used to fund a prize pool that is paid out to one or more tournament winners. The casino will usually retain a percentage of the entry fees running the tournament. The gaming devices used for the tournament are those normally used on the casino floor, but those which have been re-configured so that upon the issuance of a "start" command, the devices allow the players to play as fast as they can without requiring any funds to be deposited during tournament play. Percentage options in the re-configured gaming machines are standardized before play of the tournament. Most players start with the same amount of credits. The wins, or "points" are accumulated, held and displayed by each machine. At the end of a specific period of time, a "stop" command is sent to all of the gaming machines participating in the tournament. The gaming machines then become disabled. The winner is usually a person having the highest accumulated score of win points obtained during the tournament session. In most tournaments the winner takes the entire pot.

Currently, tournaments must be run on the aforementioned specially-configured gaming machines, which are required to be located in a special area in a casino floor or a separate room. At least one person is required as a tournament administrator and/or persons who monitor and run the tournament. The tournament setup is configured, tested, and certified as being equal in every respect on each gaming machine so that all players have an equal chance to win. The gaming machines used for the tournaments are carefully selected from the gaming machines normally used in the casino. The selected gaming machines are then enabled for tournament players to play at a defined "start" time, and they are disabled at a tournament "end" time. A tournament administrator is responsible for acquiring the score from each gaming machine. A winner is orally announced or otherwise shown on a display device.

Thus, in current tournaments, there is a requirement to collect tournament fees manually, dedicate a portion or room in the casino for the tournament location, and select and specially configure gaming machines for re-location to the tournament location. Further, there is a specific start and end time for the tournament, during which all tournament play is required to start and complete. Finally, the tournament scores are fetched manually. All of these requirements limit the opportunity of the general public to access the tournament. Further, they make the tournament costly to conduct on the part of the gaming establishment as it must provide tournament hosts or administrators, dedicate certain machines to tournament use, and provide a suitable casino area or room in order to conduct the tournament.

Some prior art systems purportedly make tournament play more available and purportedly simplify the host establishment's monitoring requirements to reduce overhead expense. However, those systems still require participating gaming machines to all be a similar type and have the same win percentage (i.e., have standardized parameters before tournament play). All gaming machines participate in the tournament for the same period of time and must to be dedicated to the tournament during the duration of the tournament.

Further, the tournament close rate, the turnover rate, or the tournament velocity rate are all terms describing a problematic area in tournament design. This is a constant issue that needs to be considered by the tournament game administrators. Tournament operators must carefully choose the number and size of tournaments available for a player so as to create what is called tournament velocity or turnover rate. If there are too many tournaments for the player community available, then the tournament velocity is too little, and player dissatisfaction occurs. If there are too few tournaments for the players, then a player may post a score in all his desired ones and may not have a place to spend any more tournament entry fees until the tournaments close. An advantage of closing tournaments quickly is that it gives the winning players more money to play even more tournaments or other types of games.

One technique used by casinos to generate revenue and customer interest by hosting slot tournament events is called roped-off floor tournaments. A slot tournament is executed in a fair manner, where each player has the same initial conditions, and the winner is determined by the player that has accrued the most points, quickest to reach a threshold, or other criteria that is the result of gaming machine game play. This type of tournament is run today in most casinos using manual processes.

Thus, it would be desirable to provide a tournament system and method without the need to dedicate a separate part of a casino floor, limit the duration of the tournament, specifically configure gaming machines of the same type and move them to the tournament area, and provide the amount of personnel typically needed to conduct a tournament. Accordingly, in light of the discussion above, those skilled in the art would recognize the need for a system that is capable of providing on-going tournament play over a broad area and over a broad spectrum of gaming machine types.

SUMMARY

Briefly, and in general terms, various embodiments are directed to gaming systems, gaming devices, and methods for presenting tournament games. According to one embodiment, a tournament gaming system, includes a plurality of gaming machines connected to a network, a tournament administration server, a tournament session server, a session service, and a session database. The tournament session server uses message stream classes and acts as a link between the tournament administration server and the gaming machines. Additionally, the tournament session server regis-

ters with the tournament administration server, wherein upon successful registration, the tournament administration server sends tournament messages to gaming machines via the tournament session server. The session service includes transport libraries. Preferably, the transport libraries use pre-configured socket ports for communication, and the session service registers with the libraries to send and receive messages to gaming machines. Typically, the session database is operable for data storage.

Other features and advantages will become apparent from the following detailed description, taken in conjunction with the accompanying drawings, which illustrate by way of example, the features of the various embodiments.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. **1** is a schematic diagram of one embodiment of a tournament gaming system.

FIGS. **2**A-**2**D are block diagrams illustrating a server side player level advancement process according to one embodiment.

FIGS. **3**A-**3**C are logic flow diagrams that illustrate the steps performed in the system to conduct a pyramid tournament according to one embodiment.

FIG. **4** is a block diagram that illustrates data flow in a method for providing an instant close tournament according to one embodiment.

FIGS. **5**A-**5**C are block diagrams illustrating components of a circuit board containing a unified additional user interface and game monitoring unit for a gaming machine according to one embodiment.

FIG. **6** is a block diagram that illustrates components of one embodiment of an additional user interface with game management unit functions merged into the additional user interface.

FIG. **7** is a block diagram that illustrates components of a base game according to one embodiment.

FIG. **8** is a block diagram that illustrates components of a client gaming system according to one embodiment.

FIG. **9** is a component and data flow diagram that illustrates data flow in a system for biometric authentication of a player according to one embodiment.

FIG. **10** is a block diagram that illustrates components of one embodiment of a client gaming device.

FIGS. **11**A-**11**F are block diagrams illustrating components of one embodiment of a system game network.

FIGS. **12**A-**12**B are block diagrams illustrating components of an embodiment of a multi-layer system game network.

FIGS. **13**A-**13**B are block diagrams that illustrate the relationship between client hardware and software and system gaming servers according to one embodiment.

FIGS. **14**A-**14**D are block diagrams illustrating components of a unified additional user interface and game monitoring unit board and software according to one embodiment.

FIGS. **15-29** are sample screen shots from one embodiment of a tournament management console.

FIGS. **30-32** are sample screen shots from one embodiment of tournament signage.

FIGS. **33-47** are sample screen shots from tournament games presented on an embedded user interface on a gaming machine.

FIGS. **48**A-**48**B are block diagrams of one embodiment of a tournament network.

FIG. **49** is a network diagram of one embodiment of a tournament gaming system.

FIGS. **50**A-**50**B illustrate one embodiment of the various components of a tournament gaming system.

FIGS. **51**A-**51**B illustrate one embodiment of the various hardware components and communication links of a tournament gaming system.

FIGS. **52**A-**52**C illustrate one embodiment of the various protocols used to communicate between the components of a tournament gaming system.

FIGS. **53**A-**53**D is a database schema of one embodiment of a tournament gaming system.

FIGS. **54**A-**54**B are flow diagrams that illustrate the steps performed in the system to conduct a tournament game according to one embodiment.

FIGS. **55-57** are flow diagrams that illustrate the steps performed in the system to conduct a tournament game according to one embodiment.

FIG. **58** is a sample screen shot from one embodiment of a tournament management console.

FIGS. **59**A-**59**B are flow diagrams that illustrate the various tournament states for a tournament server.

FIGS. **60**A-**60**C are block diagrams of the communication links between a gaming machine and the tournament server during a tournament game.

FIGS. **61**A-**61**C illustrate one embodiment of a pyramid tournament game.

FIG. **62** illustrates the various tournament states of a tournament gaming system according to one embodiment.

FIGS. **63-70** are sample screen shots from one embodiment of a tournament management console.

FIG. **71** is a block diagram of one embodiment of a tournament gaming system.

FIG. **72** is a block diagram of the tournament states of a tournament gaming system according to one embodiment.

FIG. **73** is a logic flow diagram between a session manager and a tournament server according to one embodiment.

FIG. **74** is a flow diagram between a session manager and a tournament server during a player enrollment sequence according to one embodiment.

FIG. **75** illustrates one embodiment of a tournament voucher.

FIG. **76** illustrates another embodiment of a tournament voucher.

FIG. **77** is a sample screen shot of tournament information presented to a player during an active tournament game.

FIG. **78** is a block diagram of one embodiment of a tournament gaming system using tournament vouchers.

FIG. **79** is a block diagram of the components of a tournament gaming system using tournament vouchers.

FIGS. **80-81** are logic flow diagrams of the tournament states of one embodiment of a tournament gaming system.

FIGS. **82-83** are diagrams showing a command structure of one embodiment of a tournament gaming system.

FIGS. **84-88** are sample screen shots of a tournament management console for one embodiment of a tournament gaming system.

FIG. **89** is a sample screen shot of a tournament management interface presented on a handheld device.

FIG. **90** is a block diagram of the components of a tournament gaming network.

FIG. **91** is a block diagram of a configuration of a tournament maker system.

FIG. **92** is diagram of a tournament administration system.

FIG. **93** is diagram of a tournament session server and transport communication with associated gaming machines.

FIG. **94** is a logic flow diagram of tournament sessionState transitions.

FIG. **95** is a logic flow diagram of illustrating a segmentState being forced to segmentEnded when a tournament session is aborted.

DESCRIPTION OF THE EMBODIMENTS

Various embodiments disclosed herein are directed to a tournament gaming system. The tournament gaming system includes a plurality of client side components that are in communication with server-side components that manage one or more tournament games on the client side components. According to one embodiment, a tournament server is able to manage base game tournaments on a gaming device, tournament games on mobile devices, dedicated tournament gaming devices, and tournament games presented on an IVIEW device.

In one embodiment, a tournament system is directed towards a system and method that allows competition between players of dissimilar gaming machines for potentially varying periods of time while such players are concurrently playing their gaming machines in a normal fashion or normal mode. In one aspect, the tournaments use gaming machines with non-modified base games located anywhere in the casino, or two or more casinos, while the players of those gaming machines continue to participate in normal play on the plurality of gaming machines.

In one embodiment, a gaming server (**140** in FIG. **1**) performs as a tournament server that automatically communicates with the plurality of the gaming machines **200** to offer the current or potential player of each gaming machine **200** the opportunity to play in a tournament without leaving the gaming machine **200** being played and without having to discontinue regular play of that gaming machine **200**. Thus, the offer leads to dual income and/or reward potential from a gaming machine **200** for a given period of time. The player plays his base game **202**, and if the player chooses, he can enter a tournament at the same time and compete head-to-head with other players anywhere in the facility in which they are playing. Or, he can play in competition with players, in any other facilities around the world, if the system is configured to do so through a wide-area network **150**. The players do not have to all start at the same time. Each player plays his base game **202** for a specific amount of time, the amount of money played, or the money won, or combinations thereof in order to generate a tournament score. The tournament servers **140** will group these factors dynamically against other players to create competition for prizes or merely entertainment. The tournaments can be provided for free using promotional funds or pay to play, which provides incremental income per unit time per square foot of the casino floor.

In one embodiment, a method for letting players know that they can play a base game tournament is by use of the IVIEW interface **216**. Alternate display devices can be used including, but not limited to, a second top box monitor on a gaming machine or a second window or frame in the base game display (**204** in FIG. **1**). The player is enticed to join a tournament using a gaming account by which the player is identified by insertion of a card into the card reader **212**. Alternatively, other types of accounts or factors authorize play in a tournament. If the player chooses to enter a tournament by selecting a "begin tournament game" button on the IVIEW interface **216**, then the player merely continues to play the base game **202** on the gaming machine **200** normally.

In one embodiment, a fee, if any, for the tournament game is deducted from the player's account. In one aspect of this embodiment, the fee to play a tournament game funds the tournament prize or other prizes as configured by the casino running the tournament. In one embodiment, a percentage of the wager amount is given back to the winners of the tournament, and a portion is kept by the casino as an operational management fee. In one embodiment, a player's tournament score is set to zero after the player begins the tournament.

In one embodiment, the tournament server **140** groups the player with other players automatically. In another embodiment, the player chooses which groups of players against whom to compete by selecting specific tournaments via a selection screen presented on the IVIEW interface **216**.

In one embodiment, there is no sectioning off of the casino floor for tournament-enabled gaming machines **200** and non-tournament enabled gaming machines **200**. On each gaming machine, a player plays the base game **202**, as the player normally plays, by inserting enough money into the gaming machine **200** to begin play of the base game **202**. A base game **202** is played, and each win per wager amount is accounted for by the tournament server **104** and/or the IVIEW interface **216** on the gaming machine **200**.

In one embodiment, this data is processed into a tournament score by comparing what the player won verses what was expected to win for the machine on which the player was playing. In one example, and not by way of limitation, a base game **202** tournament score is normalized in the calculation that follows:

$1.00 wager on the base game

95% theoretical payout percentage for the base game.

Expected win amount: $0.95

Actual win amount: $1.65

$1.65/$0.95*Scaling factor=Tournament score for this last game.

In one embodiment, multiple scores are combined to a tournament score and relayed to other players in the tournament using a tournament score chat server **142**. In one embodiment, the tournament score is relayed to the other participants of the tournament in real-time or periodically updated to create the competitive environment for the players. Each player's tournament score is posted at the end of his tournament time (for example: five minutes of base game play). At the completion of the tournament, the players are notified on their IVIEW interface **216** as to what their ranking is for the tournament and what the potential win may be. Consolation prizes may go to any number of players of the tournaments.

In one embodiment, no base game **202** reconfiguration is needed for a gaming machine **200** to participate in a tournament. There is no requirement that gaming machines **200** are dedicated to tournament use or have special, high-return, tournament-only pay schedules. In one embodiment, any gaming machine **200** in the casino can be used. In one embodiment, all the gaming machines **200** on the floor are capable of being played in tournament mode, even against other base games **202** with different parameters. These differences in parameters include, by way of example, and not by way of limitation, different theme games with different payout percentages, available denominations, different wager amounts, different pay tables, different volatilities, different bonus rounds, and the like. In one embodiment, the different parameters are normalized for the tournament by the scaling or waiting factor applied to each score described above.

In one embodiment, a player can perpetually play multiple tournament games and continue to post scores under one tournament identifier, which identifies a player in one or more tournaments. Play in multiple tournament games tends to improve upon the player's standing in what in effect is a longer running tournament for the player. Alternatively, in one embodiment, a player has the option to post tournament

scores using two or more completely different tournament identifiers to play as multiple players in multiple tournaments. In some embodiments, all or certain tournaments limit a player to a specific number of score posts in specific tournaments.

In one embodiment, as an alternative to tournament play starting at the players choosing, players choose to enter a tournament and when a specific number of players have also entered the tournament, and then the tournament begins. In this embodiment, the players wait until the tournament actually begins to play. However, while the players are waiting, they continue to play their base game **202** on their gaming machine **200** as normal. In one aspect of the embodiment, the tournament server **140** notifies all players automatically once the tournament start criteria (e.g., the number of players entered) has been reached. All players then start at the same time. In other embodiments, other criteria for starting a tournament are time based (e.g., a specific start time) verses a fixed number of players.

In one embodiment, all players who have committed to spending money from their player card account for a specific tournament are considered eligible and thereby allowed to play in a tournament that starts at a specific date and time. An announcement is provided that a tournament is to begin at a particular time to those eligible to play on the additional user interface on the game machine **200** that they are playing (e.g., "Fifteen minutes until a new tournament begins"). In one embodiment, the tournament completes at a specific time. However, in another embodiment, the tournament finishes once a player achieves a specific score in what is called a "sprint" tournament.

In other embodiments there are other criteria for ending a tournament. For example, in one embodiment, only a specific amount of money can be played on the base game **202** or other platform, including the IVIEW interface **216**, to create a tournament score. As such, in this embodiment, devices force a cash out of all base game **202** credits over a specific amount approved for the specific tournament play. In another embodiment, only a specific amount of credits or dollars can be spent on the base game **202** during a tournament period of time. This way, all players can only spend a specific amount of credits for a specific system tournament game verses an unlimited amount as in the preferred embodiment.

In some embodiments, lower ranking or lower scoring players are automatically eliminated from the tournament, freeing them to join another tournament. In another embodiment, a player is dropped from the tournament if he fails to achieve an intermediate tournament goal or score in a specific amount of time, because the chance that the player can win is negligible because of the tournament design.

In another embodiment, a player drops out of a tournament at the player's choice at any time. The player's points are optionally removed from the rankings entirely at that point or are frozen and retained in the rankings until the tournament period expires and final scores are tabulated. In one embodiment, the player loses his tournament entry fee in this scenario. In one embodiment, there is an optional short transition period at the beginning of the tournament where a player is allowed to leave the tournament without losing money.

In another embodiment, the tournaments are played around the clock with no casino staffing required. Even if a player is the only player, a tournament score accrual engine of the tournament controller server **140** creates a tournament score for the player and posts it to the proper tournament identifier in a table of scores in the database **160**. Once a tournament time completes and a threshold number of tournament players are achieved, or other tournament concluding criteria are met, this score is judged against the others for the tournament prize. In one embodiment, using the wide-area network **150**, a single player in one casino can compete head-to-head with other players in other casinos to create the sense of a tournament player community.

In one embodiment, tournament winnings are added to a winning player's account to allow replay of the winnings, cashing out, or redeeming for a prize at a later time. In one embodiment, a prize award may be automatically or manually paid by casino personnel who are notified of the win.

In one embodiment, a tournament begins as a "one-time" event. In another embodiment, the tournament is perpetually executed, depending on the casino preferences. In one embodiment, tournament completion rate display indicators are provided to the players on the IVIEW interface **216** to project an expected tournament completion time. This is helpful for players in deciding if it is worth waiting for a tournament to close, or whether to return at a later time for tournament play. Players who want completion quickly should choose tournaments that have a short completion time.

In one embodiment, player-specific or group-specific messaging is provided to each player on the IVIEW interface **216**, informing the player, for example and not by limitation, that the tournament is a daily tournament, and the player should keep trying to post more tournament scores to improve his chances of winning the tournament.

In one embodiment, hidden tournaments are executed by a tournament controller server **140**. The player is offered, or up-sold, to post his score in a tournament he is playing to a hidden or non-hidden tournament after his current one is finished. A single tournament entry fee can allow this tournament score to be posted into several potential tournaments, each with their own prizes associated therewith. For example, a player scores 9,893 for the tournament the player enters. In this particular tournament, it is not a very good score, and the player does not win. In one embodiment, the tournament server **140** also enters the player into a tournament competing for the lowest score of the day tournament. The player could potentially win this tournament if his score is bad enough.

In one embodiment, on the additional user interface, a player is shown a player velocity meter and given a velocity bonus for a tournament score. If the player plays the base game **202** or a game executing on the tournament server **140** at a certain velocity, then a bonus is added. In one embodiment, the velocity is calculated for example, and not by way of limitation as follows: the games per unit time, money per unit time, or maximum bets per unit time.

In one embodiment, a player only wins a prize if the player is in the top few players at the end of the tournament. In another embodiment, the system awards other prizes for any number of players in the tournament. Examples are, and not by way of limitation: raffle and sweepstakes tickets. In another embodiment, a player wins prizes in the middle or at the end of the tournament for reaching certain tournament score thresholds. In an aspect of this embodiment, a tournament score-to-prize award lookup table in the database **160** is used for a different prize for each tournament score achieved. A partial sample record from the score-to-price lookup table is shown in table 12 below.

TABLE 12

Tournament Score to Event ID table: Event ID's will award a list of Prize ID's

Tournament Score	Prize Award Event ID
>1,000	186
800	5
700	1
600	—
...	

In one embodiment, in order for a gaming machine **200** to be eligible for base game tournaments, it needs a player that is either playing or waiting to play the base game **202**. In one aspect of this embodiment, credits are required on the base game **202** of the gaming machine **200**. In one embodiment, a base game **202** on a gaming machine **200** is classified as idle based upon several rules, for example, and not by way of limitation: if no player is actively playing a game, if no credits are on the machine, if the gaming machine **200** is presently in "attract" mode providing lights and sounds, for example, in order to attract a player for a threshold number of minutes, and no player has played the base game **202**, or of no player card is inserted. In contrast, in one aspect of this embodiment, a player is identified as eligible for the tournament according to rules that suggest a player is either playing or available at the gaming machine **200**. For example, and not by way of limitation, the gaming machine **200** is checked for whether credits have been inserted. An announcement of an upcoming tournament is often sent to the gaming machine **200** if found eligible to entice the player to enter the tournament. Optionally, in one embodiment, if a gaming machine **200** is found to be sitting idle, the tournament controller server **140** sends an advertisement that a tournament is about to start to the idle gaming machine **200** in hopes of attracting a new player.

In one embodiment, players that do not have a play card for insertion into the card reader **214** or that do not otherwise have an account with the system (collectively "uncarded" players), are still allowed to play tournaments that will close in a short time, or that the rate of closure is fast enough to make it possible to reward the player at the gaming terminal if that player wins an award. This is because, for a player without an account with the system, his wins cannot be put into an account. In one embodiment, carded players and uncarded players (players who do have an account) are allowed to play free tournaments with or without a tournament prize. This helps encourage or "tease" the player to become a carded player to play for the tournament prizes.

In another embodiment, the casino floor is broken up into groups that can only compete with other groups or base games **202** identically or closely configured. In one aspect of this embodiment and for certain types of tournaments, it is required that in order to join the certain base game tournament, the players should be playing a certain base game **202** with a 94% hold percentage. In another embodiment, all game types that pay 96% or greater can join this tournament. In yet another embodiment, only skill-based games **202** (such as, without limitation, "video poker") can join a tournament. In another embodiment, any way of breaking the gaming floor down into denominations, themes, groups of games, types of players, wager amounts, types of games, configurations of games, theoretical win percentages, volatility, and the like, is used to enable or disable different base games from joining a specific tournament. While the breaking down of the floor into smaller groups is not necessarily a preferred embodiment in all cases, however, in some causes, it is preferable to create trust in the player that he is competing on an even playing field with other players who are playing similar base games **202**. Also, in one embodiment, casino-run promotions are used to advertise theme tournaments, for example, and not by way of limitation, a "Video Poker" tournament where any video poker game can join a tournament. In one embodiment, enabled machines are physically grouped on the casino floor for marketing and promotional reasons. The tournament servers **140** manage all of the tournaments and which gaming machines **200** and players are eligible to play against which other gaming machines **200** and players, removing the burden from the casino management, except at tournament configuration setup time.

In one embodiment, a player is allowed to buy more tournament time in some tournaments to improve the player's tournament score. By way of example, and not by way of limitation, after a five-minute tournament is completed, the player is provided with the option to purchase one more minute for $1.00 through their account. In one embodiment, maximum up-charges are able to be set for these types of tournaments.

Simulated Tournament Players

In one embodiment, the system simulates a number of players to meet the minimum gaming machine **200** requirement for a tournament. Simulation programs for players of games are known to those skilled in the art. For example, SIM-Earth® by Electronic Arts of Redwood City, Calif. and other popular games, including casino-based games, have used computer logic to simulate humans or game play. In one embodiment, the simulated players of the tournament play on behalf of the house, and should one of the simulated players win the tournament, the winnings are retained by the casino, or, for example, distributed to the top human player, or other distribution rules are used to distribute the winnings. In one embodiment, the simulated players and their scores are based on players who have played at previous times. This is implemented by an "instant close" tournament engine. The simulated players are used to tease a human player to create real-time interaction even when the casino floor is very light and no one else is playing tournaments. Simulated players win and lose tournaments to create any desired competitive effect.

Tournament Score Formula Calculation

In one embodiment, each tournament has its own tournament score accrual formula. Also, each player has his own tournament score equation for each tournament he plays. In one embodiment, this formula is downloaded to the gaming machine, or calculated on the gaming server **140**. For example, in one tournament, a two-player, ten-minute tournament base game **202** may use a different tournament score calculation than a five-minute, pyramid-style tournament (described below). Alternatively, in another embodiment, the tournament score is calculated based upon different types of players ("gold" and "silver" player club levels, and the like). In one embodiment, this dynamic modification of a tournament score formula occurs in the middle of a running tournament or an individual game in a tournament. The gaming systems auto-tune a tournament score calculation to get the desired entertainment effect. The change is effected between games, during individual games, or after a tournament concludes prior to a tournament of the same type begins again. In one embodiment, the same game modifications, tournament score formulas, and game variables are given to all players in a specific tournament. In another embodiment, players use different sets of these parameters.

In one embodiment, any variable or meter that can be read from the base game can be used to construct a tournament

score. In one embodiment, averages of multiple base game plays are used to smooth out the highs and the lows in a scoring methodology. The higher and lower base game plays are thrown out in order to normalize any statistical effect. In one embodiment, the tournament score formulas are designed to grow only upward to help encourage players to keep playing the base game if they want their tournament score to grow. In another embodiment, a tournament score formula is constructed such that the further the player is away from an expected payout for the player's wager amount and the theoretical win for this wager amount for the gaming machine **200**, the larger the tournament score will be. For example, and not by way of limitation: if a player plays 100 base games in a row with no wins whatsoever on a 95% theoretical payout machine, then a tournament score could be very large even as compared to a player that has won more often on the same type of game machine with a 400% actual payout win over the tournament duration. A non-linear curve is shown as a non-limiting example in FIG. **35** that is used in one embodiment to map or normalize a theoretical to actual win ratio to a tournament score.

In other embodiments, other calculation techniques are used. In one example, and not by way of limitation, the player with the highest standard deviation from the expected return is given the highest tournament score. In another example, the score is calculated to give a player the best rate of change (acceleration) of actual vs. theoretical outcome of a higher score. In another embodiment, the tournament score calculation is a simple addition of the win from each game from one base game to the next, with or without a comparison to the expected return.

For some tournaments, the tournament scores are positive or negative for one individual in a group of players. Tournament scores are calculated based upon how a player is doing compared to another player or group of players. The player that does the best at the end of the tournament period of time wins the prize. Any combination of the above-described scoring techniques can be used.

Preferably tournament scores are calculated to maximize the play activity, the wager amount, the time on the machine, the entertainment effect, and to bring new monies into the casino. In one embodiment, the tournament score calculation normalizes the variations in the base game design including, without limitation: the denomination, the wager, the theoretical payout percentage, the game theme, the game win/lose volatility, the skill games vs. the chance games, the pay table variations, the bonus round variations, the wide-area progressive wins, the size of the wide-area progressive wins, and the like. This feature reduces or eliminates the need to section off the game floor to tournaments by the casino with same-type games. Any eligible player can play any base game **202** at anytime, and if the player selects and begins a base game tournament, the player can immediately play a tournament. The player selection to enter a tournament can occur on any display device, for example, the base game display **204**. In one embodiment, selection is provided on the IVIEW interface **216** due to its touch screen capabilities.

In another embodiment, players are provided with a tournament score handicap, such as that in the game of golf. This helps to make a fair playing field especially with skill-based games or for low denomination verses high denomination players, since pay tables and theoretical payout percentages are typically higher for the latter of the two. In some embodiments, the handicaps are game, tournament, or player-specific to help create a fair tournament experience.

In one embodiment, a dynamic yield analysis engine in the tournament server **100** finds base games, games that execute on the IVIEW interface **216**, or players that should be grouped into new available tournaments to create the optimal player excitement and revenue potential for the casino. In one embodiment, the grouping occurs automatically with no player interactions.

In another embodiment, each gaming machine **200** has a separate tournament point table maintained in the tournament server **140**, an IVIEW interfaced **216**, by which it evaluates each normal gaming machine wager and win and appropriately calculates tournament points for reporting to the tournament server **140** in a manner that provides an equal opportunity to accumulate tournament points to all tournament participants. In one embodiment, there is a game point to tournament score lookup table associated with each base game **140**, so no real-time calculation of the tournament score needs to occur. In one embodiment, different tables are used for different games, themes, denominations, wager amounts, and the like.

In another embodiment, tournaments are formed in the backend server networks with player session data and/or gaming terminal data that is collected in a day in the casino as part of its player promotional processes and slot management processes, executing on the server **140**, **180**. This data collected is not necessarily real-time data. In one embodiment, it is collected nightly or at some other interval period of time. Players' base game **202** activity on gaming machines **200** is used to create tournament scores that are grouped in the tournament server **140** for competition.

In one embodiment, a tournament consists of a player's best five minute moving window in his entire play session. For example, if a player played for an hour and had a very low payout for most of the hour, but had one good five-minute window where payouts were high, then this slice of time is used for his tournament score post. This embodiment encourages players who just won big to replay much of their money back into the base game to "top off" their tournament score in order to help ensure that no one else can beat them in the tournament. In the player's mind, the player believes the player is playing with the casino's money so the more willing he is to spend a sizeable portion of the recent win to try to win big again.

As stated above, in one embodiment, different types of games, themes of games, denominations, game volatility, skill, chance, pay tables, optionally, each has their own tournaments. So, in this embodiment, only Poker games compete head-to-head against other poker games due to the skill nature of the game. The negative side of this embodiment is that the size of the group of players shrinks as gaming machines **200** are subdivided into smaller groups. Thus, there is less chance that players compete against each other due to the smaller number of machines allowed to play in each group. Therefore, the tournament in many cases takes longer to complete or close. Accordingly, in one embodiment, it is preferred to have tournaments of fewer quantity, shorter duration, and smaller numbers of players to create a quick turnover.

In another embodiment, simultaneous tournaments execute on the same client or for the same player. For example, and not by way of limitation, in one embodiment, a player posts one base game score to multiple different tournaments at the same time. One option is to provide a player the choice to play in multiple tournaments or to do so without the player's choice. For example, a player plays a limited entry tournament against a small number of players in which the player can win a prize for that tournament. In addition, the player has the same tournament score posted to a daily tournament in an attempt to win another prize. As described above, one form of this embodiment involves entering a

player into a tournament to achieve the highest win rate over an expected win rate, and to also enter the player into a tournament in which prizes are awarded to a player with the lowest actual win rate of return verses an expected rate of return. This way, even if the player loses the highest payout rate tournament, the player can still win in the other tournament. The player can pay for both with different wagers, or pay just once to play both tournaments. Alternately, one or more tournaments are paid for, and one or more tournaments are free.

In one embodiment, a tournament score for a period of time is calculated using all or a smaller group of individual wager/outcomes from each base game play. A single base game contribution to an overall tournament score is calculated in this embodiment as follows.

```
10000*(LastGameCashWON/LastGameCashWA-
    GERED/PaytablePayoutPercent);
```

wherein "LastGameCashWON" is an amount won in the last game for cash that the player won, the "LastGameCashWAGERED" is the amount wagered in the last cash game, and "PaytablePayoutPercent" is the payout percentage for the player. In one example, with a base game **202** configuration, the following parameters apply:

$0.50 Denomination Machine

92% Theoretical win amount

The expected win can be calculated as follows:

```
$0.50 play*92%=$0.46 expected win
```

An example Sequence of base game plays on this base game configuration during a tournament is as follows:

First base game played on this base game configuration

$1 wager, 2 credits played

$0.50 win

The single game tournament score contribution would be:

```
10,000*($0.50 win/$1 wager/92% theoretical win for
    this wager=5,385 tournament points.
```

Second base game played on this base game configuration:

$1 wager, 2 credits played

$2.50 win

The single game tournament score contribution would be

```
10,000*($2.50 win/$1 wager/92% theoretical win for
    this wager=27,173 tournament points.
```

In one embodiment, the single game contributions are added to a score of the scores stored in the database **160** throughout the entire tournament time. Table 13 illustrates an example of a part record listing of the score table.

TABLE 13

Base Game # and Tournament Score contribution table.

Base game # during tourn.	Single game contribution
1	5,385
2	27,173
3	0
...	...

In one embodiment, the score table is ranked by sorting from highest score to lowest score. An alternative to storage in the database **160**, is that the score table may be stored in the additional user interface **216**. In another embodiment, the table is concatenated to a specific number of elements after ranking. For example, and not by limitation, only the top 10 individual scores are summed to build the tournament score shown to the player. In this embodiment, a score can range from 0 to approximately 1,000,000. The score is averaged for all 10 games and stored in the score table. This embodiment has the effect that one good game does not guarantee a top tournament score. A player needs to play many base game plays in order to ensure that the player is able to get 10 good individual base game contributions to the tournament score. In one embodiment, a player's score never goes down and can only improve as the player plays and achieves better wins on the base game **202**. A skill-based game **202**, such as a video poker game, in one embodiment changes a player's play technique depending upon what the player has achieved so far in the tournament. For example, the player will most likely not hold a pair of jacks if it is not going to improve the player's tournament score. In one embodiment, the tournament score formula is shown to the user in a "help" screen on the additional user interface **216** to help the player determine how to achieve the best possible tournament score.

In another embodiment, the tournament score formula is:

```
Tournament score=Weighting factor*
    (totalwager*theoretical hold %)+abs(totalwin-
    (totalwager*win %))
```

Wherein the "Weighting factor" is determined based on the skill required to play a base game; the "totalwager" is the total wager placed by a player; the "theoretical hold %" is the theoretical percentage of the player's wagers that should be retained by the house or casino during game play of the base game **202**; "totalwin" is the total amount won by the player; and win percentage is the actual percentage won by the player.

In another embodiment, the highest instantaneous tournament score wins the tournament if the tournament score goes up and down throughout the tournament period or game play. The tournament server **140** records the peak tournament score in the score table that was achieved by a player in the tournament period, and this number is used for the competition. Also, the player with the most single game tournament contributions over a certain score threshold wins the tournament prize. In another embodiment, the player with the highest sustained average of single game contributions over time wins the tournament.

In one embodiment, maximum threshold values are used in the tournament score calculation for the last base game played. For example, and not by way of limitation, in one embodiment, 100,000 points is the maximum amount of an individual single base game contribution to an overall tournament score. Even if a player had a huge win on a base game **202**, it would not guarantee a tournament score that would win at the tournament conclusion time.

Tournament Score Weighting Factors

In some embodiments, other variables are combined with the tournament score calculation. Those other factors include, by way of example, and not by way of limitation, a skill game weighting factor; a number of games played weighting factor; a denomination weighting factor; a maximum bet weighting factor; a wager weighting factor; a player-type weighting factor; a tournament-type weighting factor; a pay table weighting factor; a game volatility weighting factor; the actual lifetime wager/win weighting factors; the progressive win weighting factors; the date/time weighting factors; the game theme weighting factors; a theoretical payout percentage weighting factor; a game location weighting factor; and the like. In one aspect of this embodiment, one or more of these weighting factors are added at any time for any specific tournament to create the fairest playing field as possible for the different types of players playing at different types of base games **202**. In some embodiments, these weighting factors

are fixed numbers, lookup tables, or formula based, in order to normalize or accentuate any type of gaming activity that the casino desires. For example, and not by way of limitation, a casino can have a tournament that gives a player more points if the player bets a maximum wager than if the player did not. The formulation above tends to normalize the denomination played by a player.

In one embodiment, the casino encourages the player to play $0.25 denomination machines or higher to get the best score. The casino gives a 10% advantage to players that play on those gaming machines **200**. In another embodiment, games that have an element of skill use a weighting factor that is specific to the skill game played due to the nature of the skill and the difficulty of generating a fair tournament score against players playing on 100% random chance machines. The weighting factors are inserted into the final tournament score formulation mathematics at several times or locations. For example, and not by way of limitation, the weighting factors are inserted after each base game is played, or after a group of base games have been played, or after all base games have been played in the tournament. In one embodiment, these weighting factors are player specific; base game **202** specific; location specific; device specific; gaming machine **200** configuration specific; and in one embodiment, specific to a game played on the IVIEW interface **216**.

In one embodiment, the tournament scores are inserted in real time with each single game contribution or with the combined tournament score calculations. These weighting factors can be added at the conclusion of the player's play or at the conclusion of the entire tournament.

In one embodiment, weighting factors may turn on or off at various times throughout the tournament period or when particular scoring thresholds have been achieved or not achieved. The weighting factors in one embodiment are of fixed value, linearly derived, or non-linear derived formulas or tables.

In one embodiment, the theoretical win percentage is for a maximum bet game only, or it is for each type of win in a pay table for each wager amount and for each denomination. In one embodiment, base games **202** are configured to only give the theoretical win for a maximum bet on a game play. More modern games or server side games can give the GMU **218** the detail required to calculate more accurate and fair tournament scores.

In some embodiments, different tournament calculation techniques include taking individual base game **202** contributions and calculating using different averaging techniques with prior wagers and wins, different summation techniques using probability mathematics, standard deviation/variance mathematics, or remapping them through a tournament score converter engine or lookup table. In one embodiment, best and worst individual contributions are thrown out, or best or worst moving cluster, if individual base game contributions are thrown out.

In one embodiment, individual base game contributions are not used at all. Alternatively, the entire cumulative wager/win for the entire tournament period is used instead. A goal of the tournament score formulation is to provide many possible scores in a range of for example, and not by way of limitation, 0-10,000,000. This gives fidelity of the number system to ensure everyone has a chance of beating the leader even if only by one point.

In another embodiment, tournament scores are calculated in real-time as the player plays, or after the player finishes playing in a background processing job done on the server or client. In yet another embodiment, tournament scores are pre-calculated prior to playing the actual game by using data collected on previous dates, times, or games played. Tournament scores are generated by combining several individual tournament scores or game scores into one final score for the tournament. Tournament scores from different types of tournaments or games are combined to form tournament scores, such as the Olympic decathlon event.

In another embodiment, each game has its own tournament score calculation formula to normalize it against the others it is playing against in this specific tournament. Alternatively, in another embodiment, each player has their own tournament score calculation for a specific tournament identifier in order to provide a fair playing field for players. For example:

Player #1 or Base game config #1=Use tournament score accrual method #1

Player #2 or Base game config #2=Use tournament score accrual method #2

Player #3 or Base game config #3=Use tournament score accrual method #3

In one embodiment, tournament scores calculation formulas are sent down to the gaming machine **200** for each base game **202** prior to the playing in the tournament or during or after play in the tournament. The formula may either reside in the IVIEW interface **216** or the base game **202**.

The advantage of base game tournaments is that the base game code is already certified by regulators and approved for use on the casino floor. By actively monitoring several variables on the base game by the tournament server **140**, the system derives a tournament score through mathematical manipulation of these base game wagers and wins. In one embodiment, no random generator is used to calculate the tournament score other than the already certified base game software. Thus, the gaming machine **200** is easier to approve in regulated markets, because there is no chance element in the calculation of the tournament score that is grouped with other tournament scores to determine a tournament winner. Thus, quicker regulatory approval in these jurisdictions can take place. In other embodiments, other game types are designed to calculate a winner using data collected from the base games.

In one embodiment, plasma screens throughout the casino show the current tournament leaders on them for the local facility and inter-site leader boards.

Players on the IVIEW interface **216** are teased with the pending tournament closings to encourage players to currently play in the remaining time of a tournament, the remaining entries, or prior to any other tournament-end criteria.

In one embodiment, an alternative method of creating a tournament score for a base game **202** is performed wherein scores are created by a ranked list of recent five minute wagers/wins for that specific gaming machine, or identically configured games. For example, and not by way of limitation, the tournament server **140** keeps the last wins for each five-minute window of play, and sorts them in a ranked list. The score to be inserted has found a position in the ranking list, and the system calculates how far above and below the entry points are to the closest entries. The ratio of the distance between the two scores calculates the "ones" digit of the instantaneous tournament score. The first insertion point generates the rank used in the tournament score calculation. In one embodiment, the system uses a first-in-first-out method to remove old players on the ranked list.

Tournament Rooms

In one embodiment, different tournament rooms, tournament tables, or tournament identifiers are available to allow players to get together and play against a group of their friends if they so choose. In one example, a player sends messages or calls friends to go to the "Solitaire Babes" room so they can compete against each other even though they are

not required to sit next to each other on the casino floor. This communal gaming creates a bond between the players, their friends, and the system. In one embodiment, players are able to create their own rooms and even make them access-restricted in order to prevent unauthorized players from entering the room. In another embodiment, the casino has restricted rooms set up for specific players, groups of players, or types of players, in order to create a special gaming arena for special players. These rooms or tables for the players are provided for non-tournament games too. Typically the rooms or tables are setup and are game and mode specific. Players are given options for configuring the players that are allowed in their specific tournament rooms.

Types of Tournaments—Dynamic Grouping

As discussed above, several types of grouping takes place for tournaments according to one embodiment. The following list of tournaments and grouping types are used by this embodiment:

- Synchronized Tournament. Waits for five people to join, and then the tournament begins. Top scores win the pots.
- Team Based Tournaments. Team A with five players plays against Team B with five players. The best, combined team score splits the pot. Teams with different numbers of players are allowed to compete for prizes. The tournament score calculation normalizes out the extra players' scores.
- Co-Op tournament. Five people combine their gaming to one tournament score. This score is a house-generated score, or the current top Co-Op score.
- Conquest Tournament. Five vs. five players. The lowest players score after a round is eliminated. Then, it is five vs. four players. Rounds continue until a team is eliminated. The last team standing collects the pot.
- Elimination. 10 players start. At the end of a round, the lowest score is eliminated. Then nine players are playing. The last player collects the pot.
- Time-based tournaments. There are an unlimited number of players for a fixed amount of time. Prizes are fixed or progressive, based upon a percentage of cost to play.
- Limited Entry tournaments. A fixed number of players post scores. Top players win prizes.
- Sprint Tournament. The first player(s) to achieve a specific tournament score wins.
- Merchandise tournaments. Merchandise or service types of prizes are used verses cash.

Other types of tournaments and player groupings include:

- The largest posted tournament score for a time period wins;
- Most money won or lost by any player in a time period wins;
- Most money played in a time period wins;
- Most or least tournaments won/lost in a day or other time period wins;
- Best cumulative tournament scores or average for a period or number of tournaments wins;
- Largest number of tournament scores of the day wins;
- Largest 10 or lowest 100 individual game tournament score contributions wins;
- Personal best tournament or personal worst tournament wins;
- Groups of players compete against each other for tournament prizes;
- Best number of minutes played in a tournament of the day wins; and
- If players are losing at a certain rate, then they are grouped into a tournament automatically.
- Visiting tour group tournaments. A specific trade show group can all compete for a fixed list of prizes. The system monitors their play and performs statistical analysis for them to decide winners in a group.
- Players who play longer are grouped. For example, all players whose session time is over an hour in length are grouped.
- Highest winner of the hour or other time period. This is either the absolute dollar amount, the largest amount over an expected win amount, or the best tournament score achieved in the last hour.
- Players that play maximum bets on their base game **202** for a certain percentage of time are grouped.
- Players that play a specific denomination or average wager size are grouped into tournaments.
- Players that play at a specific rate of play are grouped. For example, fast poker players are grouped, because they are very skilled.
- Grouping players who play specific games titles.
- Grouping players who play certain clusters of games.
- Players who belong to a certain TYPE of group. For example, gold, silver, or platinum players. In one embodiment, this is calculated by player interval or game session ratings.
- Grouping players by skill level, or rank level per game.
- Grouping players automatically by time.
- Grouping players by demographic information provided by players or third parties about players. (e.g., age, race, sex, birthday, spouse's name, anniversary date, and the like).
- Grouping players by what services the player likes or uses.
- Grouping players by theoretical or actual payout percentage of the machines on which they are playing.
- Grouping by casinos.
- Grouping by types of players.
- Grouping players with the most number of tournament score posts over a defined tournament score threshold.
- Grouping players by their handicap level.

In one embodiment, a player can use the game play from multiple gaming machines **202** simultaneously contributing to a tournament score. For example, and not by way of limitation, a husband and wife can combine their play into a combined tournament score, or a player can play two or more base games **202** at the same time. The player identifier allows this linking of the two machines into one tournament score. If same card or account number is used on both gaming devices, or a player logs onto both gaming devices, then the player's combined gaming activity is monitored into a single tournament score.

In one embodiment, players are notified in the mail of a promotion for different types of players stating that when the players come to the casino next, they are going to be grouped and presented with some type of game mode or tournament unique to them. These groups of players use special game features or different games because of the group to which they belong.

In one embodiment, a multiple overlapping tournament gaming system allows a player to post a score in one tournament, move on and play another, prior to the first one concluding. This way a player has many pending results at one time. The system automatically or manually configures the available tournaments to ensure that the right amount and types of tournaments are available in order to provide a player enough places to play and post a score. If there are too many, the tournament finish rate will not be fast enough. If too few, then there is a risk of a player not playing more if he has scores posted in all available types of tournaments that he likes. Dynamic Yield Analysis (DYA) helps auto-tune this capabil-

ity in order to provide an optimal tournament velocity, turnover, and money spent playing.

In one embodiment, the tournament relay **140** relays in real-time tournament scores to various players in a particular tournament without burdening a separate system game server **140** with all of the transactions. As a player's score changes, the additional user interface **216** sends to the tournament score server the player's score, the player's time left to play, the player's status, and other fields for identification and statistics on the player. The tournament score server forwards this information to only the players that are playing against each other, and/or any overhead displays in the casino for presentation to players. This is done by establishing a socket-based connection with each particular IVIEW interface **216** in the specific tournament.

In some embodiments, other messaging technologies are used to communicate to the additional user interface and overhead displays, including XML messages, over web services. Periodically, each client sends this tournament data to the database server **140** at the end of the player's specific game. After the tournament concludes the server **140** judges all of the posted scores and calculates the winners. This same engine can be used for chat and high score leader board capabilities as well as on the client devices.

In one embodiment, a "Chance or Luck Meter" is shown on the additional user interface **216** to indicate that a player can play in tournaments of varying types (e.g., gold players, a large number of players, a small number of players, time-based players, and the like). In one embodiment, a player is eliminated from the tournament and chooses to participate in a different upcoming tournament, wherein the player believes the chances are better. This chance meter provides the player an idea of how lucky the gaming machine **200** currently is. One advantage of this is that when the meter is low, the player can determine that the base game **202** is ready to go "hot," and to keep playing. If the meter is very high, the player can believe the gaming machine **200** is "hot," and he should keep playing. In some embodiments, this meter can take the form of a digital number, a linear gauge, a radial analogue "speedometer," a gauge or other gage that easily conveys the "luckiness" of the gaming machine **200** currently or averaged over several games.

The data used to calculate the Luck Meter is provided by the base game play, or a system game (run off the tournament server **140**) played on the IVIEW interface **216**. In one embodiment, the data used is the wager amount, the win amount, and the theoretical payout percentage for the entire pay table or each winning combination on a game. This data was collected by the GMU **218** from the base game through standardized protocols (discussed above) supported by gaming machines **200** on the casino floor. Alternatively, this data is collected by the back-end tournament or gaming server **140**, accounting servers (shown as **180** in FIG. **1**), and player tracking (casino marketing servers shown as **140** in FIG. **1**), and calculated in the back-end tournament servers **140** for presentation to the IVIEW interfaces **216** of the gaming machines **200**.

Further, in one embodiment, a "Win Meter" is shown to the player to denote the player's frequency of winning tournaments.

In one embodiment, the IVIEW interface **216** presents a "pyramid tournament." The tournament includes a five-minute base game tournament played against eight other players. The overall goal of the pyramid tournament system is to encourage players to maintain the tournament level so they can play for increasingly larger prizes. The players want to have competition for a more immediate reward and at the same time post this same tournament score to a longer running tournament for a bigger prize. This technique will force players to keep coming back again if they want to keep moving up the pyramid.

In one embodiment of the pyramid-type tournament, the player has a level associated with their account. For simplification only, and by way of example, and not by way of limitation, in one embodiment, the levels include hourly, daily, weekly, and monthly tournament levels. A new player starts as an hourly tournament player. The overall goal of the pyramid tournament system is to encourage players to maintain their tournament level so they can play for increasingly larger prizes.

In one embodiment, players try to win a spot in the top 10 list of players for an hour's tournament. In order to post a score in the hourly tournament, players enter a five-minute limited mini-tournament. Players do so at any time and instantly begin playing. When a player selects the pyramid tournament game button to join, they are grouped with other players that are also trying to post scores for the multiple levels of tournament prizes. In one embodiment, all of the other scores displayed are players that recently finished their play (making a new player always the last entry or nearly the last player into the tournament). This is called an instant-close tournament engine run by the tournament server.

In another embodiment, 10 spots of a mini-tournament are populated with players as they start in real time, which could leave some tournaments undecided until the needed number of players has entered. In one embodiment, this mini-tournament will have five to ten entrants, and the winner will receive a small award for his play. This prize is, by way of example only, and not by limitation, raffle tickets, cash card reimbursements for further game play, or other prizes. In one embodiment, there is no prize awarded apart from a satisfaction by the player that he is a winner. In addition, in one embodiment, all players entering the mini-tournament have the opportunity to have their score posted into their player-level-specific tournament leader board. Any player's score that is high enough to make the top ten list for his individual level has his score added to that list.

Once a new player that has been playing for the hourly tournament is in the top 10 when the tournament ends, he is advanced to the next level daily. The players with the highest scores win the hourly progressive pot. In one embodiment, this pot is distributed amongst multiple players in the top 10 or given entirely to the highest player only. Once a player has advanced to the daily level he is now able to participate in the daily tournaments, and all of his scores post there and optionally (casino configurable) down to lower levels. In one embodiment, a player remains a daily level player for as long as he continues to post scores in daily tournaments at least once every 365 days (casino configurable). In one embodiment, the player need not win a daily tournament in that time frame. He just has to play a mini-tournament and post a score. Even a losing score would renew the 365-day expiration time limit. If he fails to do this, he would drop back one or more levels and have to win at the lower level again before playing in daily tournaments.

In one embodiment, there are multiple levels for the player to climb through to reach the monthly level. The winners of the monthly level tournaments are invited back for a special yearly tournament with a large grand prize. Players may advance or fall back tournament levels for any marketing or mathematical reason the casino desires.

In one embodiment, a player has the player's five-minute tournament score posted to the current level the player is at as well as any of the levels lower than the current level. This way,

a player has a chance to still win the hourly, daily, weekly, and monthly prizes if the player is a yearly level player. In other words, a specific tournament score can post downward as well. In this embodiment, if a player wins a lower level tournament prize even though the player is a higher level player, the player does not advance levels. Other players in the lower level advance however. For example, and not by way of limitation; a level four player with a tournament score of 85,321 posts this score to level one, two and three, as well as level four (the current player level). If the player wins the level one (hourly) then the player can win the level one prize, but the player does not advance from level four to level five because the player did not post a level four tournament score high enough to advance yet, or the level four tournament has not concluded yet.

In one embodiment, when players advance from one level to the next, they do not pass their score into that new level. This forces the player to come back again to post a score at that level generating a repeat visit. This prevents a great tournament score in one lower level from winning all levels up from the player's current level.

In one embodiment, a player plays with an alias, for example BK1832 versus the player's username assigned to the player card or account. In one embodiment, this name is randomly chosen. Also, a city, state and casino name are shown on the tournament standings board to create an inter-location or state rivalry. From home, in one embodiment, players create a username/password/pin/alias to access account data including tournament information as well as play from home where allowed by law.

In one embodiment, funding for prizes of the hourly, daily, weekly, and monthly tournaments comes from the games played on the additional user interface. A portion of each $0.01 played by a player on a system is distributed to the different prize pots or pools. In one embodiment, other casino promotional funding of the progressive pots occurs.

In one embodiment, the casino is provided with several tools for configuring the pyramid tournament system. The casino is able to set up different levels of play, percentage of tournament entry fees that fund differing levels of tournaments; duration the player stays at a particular level before dropping down; the number of players that advance to the next level; the progressive increment rates for each level's progressive pots and contribution events; the length of time for the tournament; the minimum level of activity by the player; the minimum tournament score achieved at specific times to continue; and whether or not tournament scores post downward as well as to the player's current level.

With reference to FIGS. **2**A-**2**D, the block diagram illustrates a server **140** side player level advancement process. In one embodiment, players of different levels compete in limited entry, five-minute, base games tournaments for a prize. Each player's tournament score is posted to the level of progressive games that he is playing at the time for a chance to win at that prize level.

With reference to FIGS. **3**A-**3**C, a flow diagram illustrates the steps performed in the system to conduct the pyramid tournament according to one embodiment. At step **600**, a player chooses to play a pyramid tournament. At step **602**, the tournament server checks for whether the player has enough credits to play. If not, an "insufficient funds" message is displayed at step **604**. Otherwise, in step **606**, the player is provided the opportunity to open a new tournament. If the player chooses to do so, then a new limited entry tournament is opened, step **608**. Otherwise, the player is assigned to a tournament that is already running, and his account is decremented, step **610**. The tournament server determines if more players are needed for the tournament, step **612**. If there are not enough players, step **614**, then an instant-close-engine in the tournament server assigns simulated players to the tournament, as described below, step **616**. The player's time in the tournament and score are set to 0, step **618**. Base game play is monitored, step **620**, and the score is calculated, step **622**. The tournament score is sent to the relay server **142** for forwarding to other players, step **624**. If needed, more simulated players are added, step **626**, whose scores are shown to all the players along with the human players.

The system checks for whether the player's time in the tournament is up, step **628**. If not, the play continues at step **620**. If his time is up, the additional user interface posts his final score, step **630**. The system checks for whether all scores have been posted, step **632**. If so, then the tournament is concluded in the database **160**, step **634**. A prize award occurs to the top-ranked players, step **636**. All of the players' tournament scores are posted to their specific pyramid level, step **638**.

The system next checks for whether the pyramid tournament time is up for the player's specific tournament level, step **640**. If not, then the player can play another 5 minutes to attempt to achieve a better score, step **642**. Otherwise, if the time for the specific tournament level is up, then the specific tournament level closes, step **644**. A prize award distribution for the specific level occurs, step **646**.

Next, in step **648**, it is determined whether a player's score was good enough to advance the player to a new level in the pyramid. If so, the player is advanced to the next pyramid level, step **650**, and all future scores for the player post at the new level, step **652**. In one embodiment, the player is required to return and play at the new level periodically in order to maintain the level, step **654**. The system checks for whether the level has expired for that player, step **656**. If not, then the player continues to play at the new level, step **658**. Otherwise, if the level did expire for the player due to the player's failure to periodically play the tournament, then the player is decremented a level, step **670**.

With reference back to step **632**, if all of the scores were not posted to the server for the tournament played by the player, the player is notified of tournament standings, step **680**, and given the opportunity to play in the same or another tournament, step **682**. Later, the player can again view his standings or statistics for the tournament, and any prizes are automatically awarded to the player's account after the tournament ends.

Instant Close Tournaments

In one embodiment, an instant close tournament engine (ICTE) allows for an immediate or near immediate conclusion of a tournament game for a specific player. In one embodiment, this embodiment is used with a limited entry tournament having a fixed number of players playing for a prize, but it can alternatively work on other types of tournaments. Normally, when a player starts a limited entry tournament, the player can be anywhere from the first through last player to play up to the maximum allowed number of players for the specific tournament. The player does not necessarily know what number of player he is prior to starting the tournament. For example, when a player is joining a ten-player tournament and he is the first to ninth player to play, the player normally must wait for the last player to post a score in this specific tournament. The time to complete a tournament is unknown by the first through ninth players. No one else may choose to play this specific tournament for another minute, an hour, a day or longer. This uncertainty to the conclusion of the tournament creates player dissatisfaction.

With reference to FIG. **4**, a block diagram illustrates data flow in a method for providing an instant close tournament according to one embodiment. The ICTE executes in the tournament server (**140** in FIG. **1**) and uses tournament scores posted by other tournament players at an earlier time to more quickly conclude the currently running tournament. In the ten-person limited entry example tournament discussed above, if the player is the tenth player, then the player's score is grouped by the tournament server **140** against nine other players who played previously. The tournament server dynamically groups the player's tournament score against others who are playing identical tournaments. The ICTE keeps track of all tournament scores posted for all tournament games **702** for each specific type of tournament ordered by date played in a tournament history table **700** in the database (**160** of FIG. **1**). These are the scores that are used by the ICTE to "fill out" the specific tournament to help end the tournament for the player who just started.

This filling out process can take many forms. In one embodiment, the ICTE pre-fills all tournament positions prior to the player seeing his score on the ranked list of tournament scores. This way, the player is always the last one to enter the limited entry tournament **702**. Alternatively, in another embodiment, the ICTE fills out the specific tournament **702** randomly or in some order fashion to emulate many players simultaneously playing the specific tournament **702**.

There is a scenario where there are so many limited entry tournaments **702** that are started that there are not enough prior tournament scores in the ICTE tournament history database table **700** to complete the newly started L.E. tournament. In one embodiment, the ICTE loops back around in the tournament history table **700** using an index pointer to keep track of tournament scores that are delivered from the ICTE engine to the next specific tournament **702**.

In one example according to one embodiment, a player "Rick" starts a new tournament on the date June 19 at 1:23:01. The casino floor is very light, and very few people are playing tournaments, so the tournament servers **140** or tournament engine pulls names from the tournament history table **700** to help "fill-out" Rick's tournament. The tournament engine uses a current read index associated with the tournament history table **700** and begins drawing names and scores out of the tournament history table **700** in order to assign them to the tournament **702** that Rick had started, as shown by the arrows in FIG. **7**. Rick now has players to compare against his score. If during this time a "real" player chooses to play the same tournament as Rick, there will be one less "simulated" player and score to fully fill the tournament.

In one embodiment, the ICTE allows the player to design his own tournament **702**. By way of example, and not by way of limitation, options for the player are: How many players he wants to compete against, how much the tournament costs, game specific settings, type of prizes, and the like. Game specific options, include, by way of example, and not by way of limitation, individual base game tournament time or the number of levels or rounds of the game.

In one embodiment, a player's tournament score is grouped and ranked against other players that created similar tournaments **702**. When a player who paid for the specific tournament **702** finishes the tournament **702**, the score, time, and the player's player identifier are inserted into the tournament history table **700**. The player's tournament score is also posted to his specific tournament record in the table **700**. If the player wins his tournament, then the player is awarded any associated award. In one embodiment, players from which the ICTE drew scores from the tournament history table **700** do not win a prize even if their scores win the current tournament **702**.

In one embodiment, the ICTE alternatively executes in the IVIEW interface **216**. A list of recent scores and player names stored in the IVIEW interface **216** is used. In one embodiment, the names of players used by the ICTE are blocked and/or replaced with alternate names drawn from a list of names, or randomly chosen names. This is to prevent players from seeing the name of a friend or family member during the tournament. Scores and locations are used in one embodiment instead of names and scores.

In one embodiment, a player is shown an indicator on the IVIEW interface **216** that tells the approximate time left until the tournament concludes. In one embodiment, the display is calculated by the tournament servers **140** by analyzing the current closure rate of the tournaments **702**. Various other data from a yield analysis or player marketing databases is used to approximate the time until each tournament **702** will close. This gives the player some guidance as to whether or not to wait to see the close of the tournament **702** or return at a later time. Also, the player can use this information to decide whether this is a tournament **702** that the player would like to enter now or choose another that may close sooner. In one embodiment, each tournament **702** has an associated tournament velocity indicator to let the player choose an appropriate one for him.

Plasma Sign Messaging for Tournament Leaders

In one embodiment, there are at least four messages that are sent to a plasma display controller for a casino plasma display for a tournament. These messages allow the plasma signs to show tournament leaders and prizes for the tournaments. Message protocols for display controllers or other servers are used as necessary for the particular casino's requirements. The messages used in this embodiment are:

1) TournamentWinStartNoStopNeeded.xml;
2) TournamentWinStop.xml;
3) TournamentLeaderboardUpdate.xml; and
4) TournamentWinStart.xml.

In one embodiment, the TournamentWinStartNoStopNeeded.xml message has the following structure:

```
<?xml version="1.0" encoding="UTF-8"?>
<Signage xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:noNamespaceSchemaLocation="BGSSignMessage.xsd" Checksum="0000">
    <Envelope>
        <Source MessageID="151" Name="Tournament Win"
    LocationID="TOURN100"/>
        <TimeStamp SourceTimeUTC="2005-04-21T16:18:00Z"/>
        <Delivery DeliveryReceipt="false" SecureLog="true"/>
    </Envelope>
    <Payload>
        <Target Name="TOURN001WIN" Type="OneShotTrigger"/>
        <Command Name="Start" DataAction="Overwrite"/>
        <Records FieldCount="8">
            <FieldDefs Name="TournamentID" KeyField="false" Type="Text"
```

-continued

```
    MaxLen="10" />
            <FieldDefs Name="TournamentName" KeyField="false" Type="Text"
    MaxLen="50"/>
            <FieldDefs Name="CurrentPot" KeyField="false" Type="Text"
    MaxLen="20"/>
            <FieldDefs Name="TournamentClosingDateTime" KeyField="false"
    Type="Text" MaxLen="20"/>
            <FieldDefs Name="EntryNumber" KeyField="true" Type="Number"
    MaxLen="4" DefaultVal="0"/>
            <FieldDefs Name="Name" KeyField="false" Type="Text"
    MaxLen="10"/>
            <FieldDefs Name="Score" KeyField="false" Type="Number"
    MaxLen="9"/>
            <FieldDefs Name="Win" KeyField="false" Type="Text" MaxLen="20"/>
            <Record>
                <Field Name="TournamentID" Value="100"/>
                <Field Name="TournamentName" Value="Hourly Pyramid
    Tournament"/>
                <Field Name="CurrentPot" Value="150.50"/>
                <Field Name="TournamentClosingDateTime" Value="2005-09-
    21T16:00:00Z"/>
                <Field Name="EntryNumber" Value="1"/>
                <Field Name="Name" Value="Player1"/>
                <Field Name="Score" Value="235000"/>
                <Field Name="Win" Value="10,000"/>
            </Record>
        </Records>
    </Payload>
</Signage>
```

In one embodiment, the TournamentWinStop.xml message has the following structure:

```
<?xml version="1.0" encoding="UTF-8"?>
<Signage xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:noNamespaceSchemaLocation="BGSSignMessage.xsd"
    Checksum="0000">
    <Envelope>
        <Source MessageID="151" Name="Tournament Win"
    LocationID="TOURN100"/>
        <TimeStamp SourceTimeUTC="2005-04-21T16:18:00Z"/>
        <Delivery DeliveryReceipt="false" SecureLog="true"/>
```

-continued

```
    </Envelope>
    <Payload>
        <Target Name="TOURN001WWIN" Type=
        "RecurringTrigger"/>
        <Command Name="Stop" DataAction="Overwrite"/>
    </Payload>
</Signage>
```

In one embodiment, the TournamentLeaderboardUpdate.xml message has the following structure:

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- edited with XMLSpy v2005 rel. 3 U (http://www.altova.com) by Ian P Finnimore (Bally
    Gaming + Systems) -->
<Signage xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:noNamespaceSchemaLocation="BGSSignMessage.xsd" Checksum="0000">
    <Envelope>
        <Source MessageID="150" Name="Tournament Leader Board Update"
    LocationID="TOURN100"/>
        <TimeStamp SourceTimeUTC="2005-04-21T16:18:00Z"/>
        <Delivery DeliveryReceipt="false" SecureLog="true"/>
    </Envelope>
    <Payload>
        <Target Name="TOURN001LEADER" Type="DataTable"/>
        <Command Name="Update" DataAction="Overwrite"/>
        <Records FieldCount="7">
            <FieldDefs Name="TournamentID" KeyField="false" Type="Text"
    MaxLen="10"/>
            <FieldDefs Name="TournamentName" KeyField="false" Type="Text"
    MaxLen="50"/>
            <FieldDefs Name="CurrentPot" KeyField="false" Type="Text"
    MaxLen="20"/>
            <FieldDefs Name="TournamentClosingDateTime" KeyField="false"
    Type="Text" MaxLen="20"/>
            <FieldDefs Name="EntryNumber" KeyField="true" Type="Number"
    MaxLen="4" DefaultVal="0"/>
            <FieldDefs Name="Name" KeyField="false" Type="Text"
    MaxLen="10"/>
            <FieldDefs Name="Score" KeyField="false" Type="Number"
    MaxLen="9"/>
            <Record>
```

-continued

```
                <Field Name="TournamentID" Value="100"/>
                <Field Name="TournamentName" Value="Hourly Pyramid
    Tournament"/>
                <Field Name="CurrentPot" Value="150.50"/>
                <Field Name="TournamentClosingDateTime" Value="2005-09-
    21T16:00:00Z"/>
                <Field Name="EntryNumber" Value="1"/>
                <Field Name="Name" Value="Player1"/>
                <Field Name="Score" Value="235000"/>
            </Record>
            <Record>
                <Field Name="TournamentID" Value="100"/>
                <Field Name="TournamentName" Value="Hourly Pyramid
    Tournament"/>
                <Field Name="CurrentPot" Value="150.50"/>
                <Field Name="TournamentClosingDateTime" Value="2005-09-
    21T16:00:00Z"/>
                <Field Name="EntryNumber" Value="2"/>
                <Field Name="Name" Value="Player2"/>
                <Field Name="Score" Value="205000"/>
            </Record>
            <Record>
                <Field Name="TournamentID" Value="100"/>
                <Field Name="TournamentName" Value="Hourly Pyramid
    Tournament"/>
                <Field Name="CurrentPot" Value="150.50"/>
                <Field Name="TournamentClosingDateTime" Value="2005-09-
    21T16:00:00Z"/>
                <Field Name="EntryNumber" Value="3"/>
                <Field Name="Name" Value="Player3"/>
                <Field Name="Score" Value="185000"/>
            </Record>
            <Record>
                <Field Name="TournamentID" Value="100"/>
                <Field Name="TournamentName" Value="Hourly Pyramid
    Tournament"/>
                <Field Name="CurrentPot" Value="150.50"/>
                <Field Name="TournamentClosingDateTime" Value="2005-09-
    21T16:00:00Z"/>
                <Field Name="EntryNumber" Value="4"/>
                <Field Name="Name" Value="Player4"/>
                <Field Name="Score" Value="87000"/>
            </Record>
            <Record>
                <Field Name="TournamentID" Value="100"/>
                <Field Name="TournamentName" Value="Hourly Pyramid
    Tournament"/>
                <Field Name="CurrentPot" Value="150.50"/>
                <Field Name="TournamentClosingDateTime" Value="2005-09-
    21T16:00:00Z"/>
                <Field Name="EntryNumber" Value="5"/>
                <Field Name="Name" Value="Player5"/>
                <Field Name="Score" Value="108000"/>
            </Record>
        </Records>
    </Payload>
</Signage>
```

In one embodiment, the TournamentWinStart.xml message has the following structure:

```
<?xml version="1.0" encoding="UTF-8"?>
<Signage xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:noNamespaceSchemaLocation="BGSSignMessage.xsd" Checksum="0000">
    <Envelope>
        <Source MessageID="151" Name="Tournament Win"
    LocationID="TOURN100"/>
        <TimeStamp SourceTimeUTC="2005-04-21T16:18:00Z"/>
        <Delivery DeliveryReceipt="false" SecureLog="true"/>
    </Envelope>
    <Payload>
        <Target Name="TOURN001WWIN" Type="RecurringTrigger"/>
        <Command Name="Start" DataAction="Overwrite"/>
        <Records FieldCount="8">
            <FieldDefs Name="TournamentID" KeyField="false" Type="Text"
    MaxLen="10" />
```

-continued

```
            <FieldDefs Name="TournamentName" KeyField="false" Type="Text"
    MaxLen="50"/>
            <FieldDefs Name="CurrentPot" KeyField="false" Type="Text"
    MaxLen="20"/>
            <FieldDefs Name="TournamentClosingDateTime" KeyField="false"
    Type="Text" MaxLen="20"/>
            <FieldDefs Name="EntryNumber" KeyField="true" Type="Number"
    MaxLen="4" DefaultVal="0"/>
            <FieldDefs Name="Name" KeyField="false" Type="Text"
    MaxLen="10"/>
            <FieldDefs Name="Score" KeyField="false" Type="Number"
    MaxLen="9"/>
            <FieldDefs Name="Win" KeyField="false" Type="Text" MaxLen="20"/>
            <Record>
                <Field Name="TournamentID" Value="100"/>
                <Field Name="TournamentName" Value="Hourly Pyramid
    Tournament"/>
                <Field Name="CurrentPot" Value="150.50"/>
                <Field Name="TournamentClosingDateTime" Value="2005-09-
    21T16:00:00Z"/>
                <Field Name="EntryNumber" Value="1"/>
                <Field Name="Name" Value="Player1"/>
                <Field Name="Score" Value="235000"/>
                <Field Name="Win" Value="10,000"/>
            </Record>
        </Records>
    </Payload>
</Signage>
```

IVIEW Interface System Gaming Platform

With reference to FIGS. **5A-5C**, a block diagram illustrating components of a circuit board containing a unified IVIEW interface **216** and GMU (or player tracking user interface), according to one embodiment, is shown. The board of this embodiment has all of the hardware features to function as an electronic gaming device. In one embodiment, an external pointer/navigation device and/or pin pad is used in lieu of a touch screen input device.

In one embodiment, a trusted platform module (TPM) **4002** is used as an extra security chip based on industry standards, which enables users to store digital signatures, passwords, software authentications and encryption data in one secure repository. Endorsed by the Trusted Computing Group standards organization, the TPM **4002** provides businesses with protection for sensitive information. The TPM **4002** ensures that the gaming software has not been tampered with. An advantage of this is that gaming outcomes can be determined on IVIEW interface **216**, or another client device using a TPM **4002**, to reduce the load on system gaming servers **140**. This means a random number generator (RNG) can reside on the IVIEW interface **216** verses the servers.

With reference to FIG. **6**, a block diagram illustrates components of one embodiment of an IVIEW interface **216** with GMU functions merged into IVIEW interface **216**, thereby obviating the need for a separate GMU **218**. In one embodiment, Ethernet-IP based card reader **212** can be used in lieu of a serial or USB card reader **212**. In one embodiment, the card reader **212** can be a magnetic strip or smart card type. In one embodiment, a sound mixer **4202** is included to mix sound signals from both the IVIEW interface **216** and the base game **202** for a set of speakers **4204**. In an alternative embodiment, the sound mixer **4202** is not needed if the IVIEW interface **216** has its own speakers.

With reference to FIG. **7**, a block diagram illustrates components of a base game **202** according to another embodiment in which the base game **202** includes functionality of both the IVIEW interface **216** and the GMU **218**, thereby obviating the need for a separate IVIEW interface **216** and GMU **218**. A combination base game display and a web protocol browser **4208** is included in order to display both base game **202** play, and system game play (in the browser portion).

With reference to FIG. **8**, a block diagram illustrates components of a client system that is GMU **218** based. All functions of the client system are centered around the GMU **218** which functions as a hub for the components of the client system. The base game **202**, IVIEW interface **216**, card reader **212**, and the like, are controlled by the GMU **218** to which these components connect directly. An Ethernet connection connects directly to the system gaming server **140**. A printer **4302** is further included to print tickets, vouchers, and the like. Further, in one embodiment, a game administration computer or terminal **4304** is directly connectable to the GMU **218**, by way of example, and not by way of limitation, via a serial or USB connection.

Table 13, by way of example, and not by way of limitation, lists some messages that are exchanged between the IVIEW interface **216** and system gaming server **140** according to one embodiment.

TABLE 13

Sample Messages Exchanged Between The iVIEW Interface And System Gaming Servers

Ver	Name	Purpose	Parameters	Return
1.0 2.0	SGS_PlayerCard Inserted	Checks to see if the player has won any tournaments and has any eGameCash. Returns Player Id, Level Id,	PlayerCardId	HasCash PlayerNickname Pid LevelId

TABLE 13-continued

Sample Messages Exchanged Between The iVIEW Interface And System Gaming Servers

Ver	Name	Purpose	Parameters	Return
		Tournament Id, Scheduled Tournament Id. EGameCredits are moved to the IVIEW.		Tid STId eGameCredits Status Code
1.0 2.0	SGS_PlayerCard Removed	EGameCredits are added back to the player account.	PlayerCardId EGameCredits	Status Code
XX	SGS_GameOver	Returns the player score and amount of eGameCash played. Tournaments are funded from the eGameCash played.	PlayerCardId GameId PlayerScore Amount Played	HasCash Status Code
1.0	SGS_eGameCashOut	Allows player to cashout his eGameCash. EGameCash will be transferred to the Base Game. Note, only the eGameCash won from tournaments will be sent. EGameCash on the IVIEW will remain.	PlayerCardId	ServerAmount
1.0 2.0	SGS_Init	Casino Console should try to connect to the Game Server on startup and returns initialization settings		Status Code
2.0	SGS_RegisterGMU	Once a connection is established with the GMU, GMU registration data is sent to the Game Server	Casino Id Game Serial # Game Id Pay Table Id Base % GMU Time GMU Id	Site Id Status Code
2.0	SGS_PlayerLogin	Player Tracking card is inserted. Returns player specific settings. URL to show the player his available games to play. URL1 to show player his results.	Player Card Number	Player Id Player Status eGameCredits Game Results url Games url
2.0	SGS_Player Authentication	Player keys in his pin number. The player needs to authorize to play a System Game.	Player Id Player Pin number	Status Code
2.0	SGS_LoadGame	Game to load, get its settings, pay table, denoms available.	Site Id Game Id Player Id	Pay Table Denom Table Max Bet Table Game Settings
2.0	SGS_BaseGmAmount Played	Once the Base Game Handle breaks the threshold, handle amount is sent. Player eGameCash is returned.	Player Id Amount played	Player eGameCash Status Code
1.02.0	SGS_BeginGame	System Game is to begin.	Site Id Game Id Player Id Tournament Id Tournament Type Id eGameCredits Played Denom Played STId	History Id eGameCredits Used STId
1.02.0	SGS_EndGame	Game has finished so report score.	Score HistoryId Site Id Game Id Player Id Scheduled Tourn Id ?Amount Won?	url for show results Player buckets
2.0	SGS_XfromEGame Credits	Convert eGameCredits to eCash or cash.		
2.0	SGS_XtoEGame Credits	Convert eCash or cash to eGameCredits.		
2.0	SGS_GetGame Settings	This method allows any game played to get specific configuration data from the server prior or during play.	Site Id IVIEWID, Game Id, Mode Id, Player Id	XML string of all game-specific configuration data for the particular chosen game.

TABLE 13-continued

Sample Messages Exchanged Between The iVIEW Interface And System Gaming Servers

Ver	Name	Purpose	Parameters	Return
1.0	CM_SaveGameState	Allows game to save state	Any string	
1.0	CM_RestoreGame State	Allows game to restore a saved game state	GameID	Saved string
1.0	CM_Message	Message Event CMGDKGameMessages: (messages from game) GetSystemSettings, GetGameSettings, GetPayTable, GameBegin, GameEnd, ShowResults, MenuPressed GetGameOutcome( ); GetRandom( ) CMGDKSystemMessages (messages to Game) PrimaryGameStart, PrimaryGameEnd, GameBeginResponse, GameEndResponse, BalanceUpdate, TakeScore, Load, Show, Hide, Exit, Pause, GetGameSettingsResponse, GetSystemSettingsResponse, GetPayTableResponse,		
1.0	CM_MessageHandler	Message delegate.		
1.0 2.0	CM_GetProperty	Retrieves a property	String property tag	

Player Login

In one embodiment, complete user registration occurs at the IVIEW interface **216**, a web portal, kiosk, casino registration desk, or electronic transfer from third party authorized sites. The PIN and/or username and password are created at this time to authorize transactions to the player's account. In one embodiment, player demographic information is collected at the registration time to help target the player with advertisements, mailings, game recommendations, promotions, and the like.

As discussed above, playing system games can be for registered or unregistered players (carded and uncarded, or players with or without usernames/passwords). In one embodiment, uncarded or unregistered players have fewer features available to them. For example, and not by way of limitation, the player is able to accrue eGameCash on the IVIEW interface **218**, but is not able to save the earned eGameCash to an account for later access unless an account is created at the IVIEW interface **218** device. In another embodiment, a ticket can be printed with temporary account information to allow the uncarded player to save earned eGameCash, cash winnings, and a game state regarding a game the player was playing. In one embodiment, any account meters for uncarded players are able to play subsequent players whether carded or not. In yet another embodiment, the uncarded player's account meters are automatically decremented to zero after a period of time of inactivity by a user or base game cash out. In another embodiment, the uncarded player's account meters can be given to carded players in the form of eGameCash as described herein with respect to the eGameCash accrual engine.

A player can login into the system gaming server **140** in several ways. In one embodiment, access is prohibited to certain activities unless the proper player can be authenticated so the player's gaming activity can be tracked. In one embodiment, the login process requires something the player has in his possession and something he knows. In one embodiment, the player is able to browse the games and rules without a player card inserted as an inducement to become a carded player by seeing the exciting gaming products available. Some system games are playable by registered players, but games that award their prizes at a later date are blocked for unregistered players according to one embodiment (e.g., tournaments, raffles, and sweepstakes). This is because winnings in this embodiment are awarded to a specific player or player's accounts, and these accounts do not exist for unregistered players.

In one embodiment, when a carded or registered player wants to play, the player is asked to insert their magnetic card or smart card into the card reader **212**. After successful PIN entry, or biometric entry, the player is authorized against the casino market place and the system gaming servers **140** and **180**, and if the account is valid, the player is authorized to begin playing at the system gaming site. Inactive accounts are terminated by the casino after some period of time in one embodiment. In one embodiment, accounts are put on hold until the user consults with an attendant or customer service agent as an aide in getting the player's attention and action regarding some issue. Players can also enter a username or alias and password by which to gain access without the magnetic card or smart card. In one embodiment, biometric devices are used in combination with a username and/or

password to gain access to a player account at an IVIEW interface **216** or other system gaming client devices, or web portals.

In one embodiment, temporary cards are freely given to uncarded players for the player to accrue eGameCash and bonus points, even though the player has not gone through the registration process at a web portal or registration desk. In one embodiment, a player is asked to enter a PIN or password at card insertion time, or prior to system game play. In one embodiment, the unregistered players are not able to cash out any system game winnings until a full registration takes place. This rule is casino configurable. These temporary accounts accrue eGameCash to play system games. In one embodiment, a player is able to cash-out their winnings with temporary cards if the system allows. Cash-outs can transfer credits to the base game and/or special tickets can be printed describing the cash or prize ticket. In one embodiment, the printing of tickets is supported by system printers attached to the GMU **218**, or printers attached to the base game **202**. The SAS 6.0 or BOB Protocol supports printing cash vouchers to enable print outs that do not originate from the base game **202** themselves.

In one embodiment, temporary accounts can be given to a player by the use of a ticket that is printed with a code number that references a specific unnamed account in the system gaming server **140**. This ticket is reinserted into bill acceptors on the gaming devices **200**, scanned with an optical scanner at gaming device **200**, or manually entered into the IVIEW interface **218** to gain access to this account.

Several different methods can be used to allow an uncarded casino player account-based access to system gaming features. Current systems typically require each player to have an account on the system for players to take advantage of club membership. This account is used for individual identification and accrual of points, awards, or other incentive or loyalty program items.

There is difficulty in offering these programs to players who have not been registered or enrolled in these programs prior to their playing slots. In one embodiment, the system detects the uncarded player who has been given a temporary account, identification number, and instrument for notifying the system of their presence at a game machine **200**.

In one embodiment, the uncarded player is asked by the IVIEW **216** if they would like to play these system games and if they are willing to have a temporary account created for them. Upon acceptance, the system uses a ticket printer to print a bar-coded ticket having an identifier denoting the ticket as a player ID ticket (and not a ticket redeemable for cash), along with the player's newly-generated ID number.

The player can then identify themselves by inserting this ID ticket into a slot's bar-code-enabled bill acceptor which will notify the slot system of the player being present at the game (via the player ID on the ticket bar-code). At this point, the system may reject the ticket from the bill acceptor for the player to reuse at another gaming machine **200**. In this case, the player's session is closed based on either a lack of play on the gaming machine **200** for a predetermined period, or, the player can close the session by pressing a button on the IVIEW interface **218**.

In one embodiment, the ticket is stacked in the bill acceptor stacker, and a copy is printed by a game ticket printer at the time the player wishes to leave the game (as signaled by their pressing a button on the IVIEW interface **218**). One additional feature in this embodiment is that a message is sent to an employee notification system (i.e., slot host pager), telling the host to retrieve the automatically-printed magnetic strip card (magcard) from the promotions booth to give to the player at the requested slot for a more convenient identification method. In this embodiment, the player may still use their printed ticket while waiting. Alternatively, the player is instructed on where to pick up their automatically-generated magcard. In one embodiment, the player is also given a password or PIN for use at a kiosk used for printing magcards.

With reference to FIG. **9**, a component and data flow diagram illustrates the data flow in the system for biometric authentication of a player. In one embodiment, biometric devices are used in addition to, or in lieu of, any tangible item that the player has or is given to uniquely identify that person. Biometric devices include, by way of example, and not by way of limitation, fingerprint devices, handprint devices, voice recognition, handwriting analysis, facial recognition, retinal scan, DNA scan, thermal scans, and the like. In the embodiment, of FIG. **44**, a smart card **4500** also has the biometric input device included with the card. Biometric data **4502** stored in the card itself is compared with the input from the biometric input device when inserted or connected wirelessly to the card reader **212** for the gaming device client **4400**.

In another embodiment, the biometric input device (e.g., fingerprint, eye, or image scanner) is part of, or connected to the gaming device (which in some embodiments comprises an IVIEW interface **216**), player tracking unit **212**, or separate device **4508**. In one embodiment, the biometric data to which the biometric input is compared is a remote, third-party, trusted biometric registry, such as Verisign®, a bank, or the U.S. Government, **4510**. The input is sent to the trusted registry **4510**, along with a user ID, and for example, a password, and the trusted registry sends back an answer as to whether the biometric data matches. Biometric is digitally encrypted with a public/private key cryptographic process prior to sending it to any remote server. In one embodiment, the biometric data is sent as hash or other encrypted data that uniquely identifies the raw biometric data. In another embodiment, instead of using a third party trusted registry **4510**, the casino has its own biometric database **4512**.

In another embodiment, a personal computing device **4400** includes the biometric reader **4508** that compares biometric input against a local biometric database **4509**, or a remote biometric registry **4510** to approve gaming activity. Further, in one embodiment, electronic funds are transferred into the gaming device **4400** or gaming server **140** using a secure wallet **4511** to allow game wagers or credit purchases to occur.

Biometrics are helpful at remote gaming locations and with wireless devices to help with the age and personal identification of the player for regulated gaming markets and products. Periodic biometric scans are required in some embodiments during play of a game to ensure the authorized person is actually playing, and not another substituted person. At registration time, a biometric scan take places for an individual, and the data representative of the biometric scan is to be stored in a secure database associated with the player account. User age or birth date is entered into the database so as to create a jurisdictionally-compliant gaming system per player and per access point to the system gaming server **140**. In one embodiment, this registration takes place at any casino or government-approved registration location. Casino personnel or government-approved personnel take the registration data from the player and authenticate the player's various forms of identification. Age and/or biometrics are checked for whether they are associated to the one person. In one embodiment, registration kiosks are used in combination with or alone without extra personnel required in the process.

In one embodiment, a temporary carded player is allowed to accrue eGameCash and play. A cash-out by these players is not allowed until full registration is performed by the player. These cards are freely handed out on the casino floor for players allowing them to play anonymously until they want to cash-out. The goal is to tease the player into becoming a carded player.

Simultaneous play by family or group members using the same card number or player account is allowed by the casino in one embodiment. These accounts all accrue eGameCash to the same account, and these players can play as a group against other groups.

With reference to FIG. **10**, a block diagram illustrates components of an alternative embodiment for a client gaming device **4400** to play system games. In this embodiment, a geo-location device **4402** is used to locate a specific player for regulatory and other purposes. Geo-location techniques that can be used include by way of example, and not by way of limitation, IP address lookup, GPS, cell phone tower location, cell ID, known Wireless Access Point location, Wi-Fi connection used, phone number, physical wire or port on a client device, or by the middle tier or backend server **180** accessed. In one embodiment, GPS **4402** and biometric **4404** devices are built within a player's client device **4400**, which in one embodiment, comprises a player's own personal computing device **4400**, or provided by the casino as an add-on device using USB, Bluetooth, IRDA, serial or another interface to the hardware to enable jurisdictionally compliant gaming, ensuring the location of play and the identity of the player. In another embodiment, the casino provides an entire personal computing device **4400** with these devices built in, such as a tablet type computing device, PDA, cell phone or another type of computing device capable of playing system games.

In one embodiment, different features of the system game system are enabled or disabled depending on the jurisdiction and/or the identity of the player who is accessing the system. For example, skill games only may be played in some jurisdictions by any person. Or skill predominate games are available for minor players in other jurisdictions.

Other jurisdictions limit the types of prizes that can be won. For example, a jurisdiction does not allow gift certificates. The system game servers have the capability to prevent these types of awards and provide alternate awards that are compliant with local, state, federal, and international law.

Other jurisdictions require prizes not to be shipped into their jurisdiction. The system game server prevents prizes from being mailed into these jurisdictions. Further, various wager/payout restrictions are enforced in specific jurisdictions, such as Texas, where the player can only play for prizes and cannot win in excess of $5 or 10 times the wager amount whichever is less. Some jurisdictions limit the size of wager for a game. Other jurisdictions limit the amount of wins per game or payline. The system game server **140** manages this regulatory compliance, including by using the above-mentioned geo-location techniques to determine the location and identity of a player.

New wagers or game plays are blocked by the system game server **140** under certain circumstances according to one embodiment. By way of example, and not by way of limitation, an individual game will not provide the option for the player to bet more than the maximum number of credits or cash allowed. In another embodiment, a maximum wager is set for a player per gaming session, or for a specific time period. In another embodiment, the list of available games is modified. In another embodiment, credit purchases are blocked at certain times, or after certain limits have been reached. In another embodiment, the number of games played in a time period is controlled. In another embodiment, the player is stopped after reaching a threshold for losses in a period of time. Player demographics, such as age, sex, and player group can block new credit wagers. Further, parental or master account restrictions on a child or sub-account can block wagers.

Further, in one embodiment, the system gaming server **140** automatically reconfigures for a certain player in a certain jurisdiction on a specific type of gaming device. Content and game server **140** modifications can include, by way of example, and not by way of limitation, modifications made to currency converters, currency purchase options, game selection options, game configurations, skill or chance game options, denominations of play, size of wins allowed per jurisdiction, maximum credits allowed, minimum cost to play, cost of credits, advertisements seen, third party services available, third party gaming sites available, speed of play for games, bonus rounds available, bonus games available, progressives available, available promotions, available prizes, and prize types.

In one embodiment, player registration occurs at a web site or a physical site or registration terminal (username, password, PIN, player card, and the like, and other player or group-specific information created at this time). In one embodiment, this registration occurs at a casino's player club registration desk, but can occur using any gaming or non-gaming device capable of collecting registration data with or without operator assistance.

In one embodiment, responsible gaming limits setup is performed during registration. (A player and/or casino associates one or more of the above-discussed responsible gaming limits with this registered account.)

In one embodiment, parental controls are entered for the account. If the account is for a child, child account limits are setup. In one embodiment, by way of example, and not by way of limitation, these rules limit the types of games, amount of money spent playing games, amount of purchases, time spent playing or doing other activities in a system game, what services are available for the player, and which currency conversions are available by the player. Parental controls can be entered at any time during or after registration.

In one embodiment, if a player desires to play regulated games on non-regulated gaming devices, in non-monitored locations, and/or at Internet accessible web portals, then the player provides biometric data at a government or casino approved biometric registration site that requires the player to be physically present. Identity of the player is checked by approved personnel with one or more photo identifications proving the age, the name, and the address of the player. The player's biometric identity is maintained in the database **160** associated with the player's birthday, name, and other demographic or address information. If registration is performed at a casino, then this biometric data can be directly associated against the unique player identifier that includes, for example, username or player club card number, and the like. If the biometric registration occurs at a third party registration site, the data is associated with a unique user identifier (user ID). In one embodiment, a biometrically-registered user is provided a new government issued or approved card, or a casino-approved smart card ID capable of storing all types of data including biometric data in secure memory within the card. Other smart cards can be used as long as they contain biometric data, or authorize secure access to a recognized database containing biometric data. In another embodiment, the IVIEW interface **216**, or other client gaming device, has a secure biometric repository contained within it, such that, at any time the gaming software executing therein can authen-

ticate the player against this local biometric repository. For example, in one embodiment, a cell phone carrier registers and manages the biometric data, either in a remote database or in the cell phone's secure memory. In one embodiment, the smart card used is the national Biometric ID smart card authorized by the U.S. Congress in 2005.

In another embodiment, a player accesses an approved gaming portal on an approved or non-approved gaming device. For example, and not by way of limitation, an example of an improved gaming portal is www.games.harrahs.com.

In one embodiment, the system logs the IP address and other geo-location specific data for client gaming devices. As discussed with respect to FIG. **9**, geo-location is accomplished in one embodiment by a GPS device **4402** that is provided to the player by the casino, or by a third party regulatory agency. In another embodiment, the GPS device **4402** is embedded in the gaming client device **4400** as provided by the manufacturer. In one embodiment, geo-location is gathered by detecting the cell phone tower used by a wireless-type gaming device client **4400**. The system gaming server **140**, or third party cellular location service, uses the cellular tower location being used by the wireless device to determine the location of the device **4400**. In one embodiment, geo-location of the gaming device client **4400** can also be accomplished by detecting for known wireless access points (WAPs) being used, or if a wireless device uses a certain wireless protocol and frequency then the system can determine the location of the player due to the limited range of certain types of wireless protocols at certain locations. For example, a Bluetooth connection has a 30-foot range from the client device being used by the wireless client **4400**, or, 802.1A/B/G networks have approximately a 300-foot range. In one embodiment, the geo-location method uses the dialup access number and a caller ID reader to determine the area code and phone number from which a player is playing. This area code can provide the graphic location of the gaming device. The geo-location data is associated with the specific player for the specific gaming session on the specific gaming device **4400** for a determination of options, or whether the player is allowed to play a system game at all.

In one embodiment, gaming content and configurations are dynamically modified depending upon the web portal, wireless access point, and/or device used, to gain access to the system gaming server **140**. Modifications include, for example, not by way of limitation, the different games available. In one embodiment, non-approved gaming device **4400** require gaming outcomes to be determined on the server **140** for chance-based games, while approved secure devices allow gaming outcomes to be determined on the client device **4400**.

In another embodiment, skill-based game outcomes can be determined on the client device **4400**. These game outcomes are securely sent to the system gaming server **140** using HTTP protocol. Digital Certificate authentication by third party certificate authorities, for example, and not by way of limitation, Verisign®, or local casino-based certificate authorities, can ensure the client device is communicating to the proper system gaming server **140**. In another embodiment, the gaming content is automatically localized for the appropriate language used after used the above described geo-location techniques.

In another embodiment, game parameters are modified based upon player specific attributes, which include, by way of example, and not by way of limitation, the player's demographic information, player club level, or other player-specific or group-specific data. In another embodiment, data collected by the yield analysis engine is used. Game server site parameter modifications include actual reconfiguration of the system gaming servers. For example, and not by way of limitation, in one embodiment, the player is pointed to a different web location managed by the system gaming server **140**, and/or reconfiguration data is moved to the client gaming device **4400** so that reconfiguration occurs in the client-by-client side software.

With reference to FIGS. **11A-11F**, in one embodiment, a network diagram illustrating components of the system game network illustrates in which system game servers **140** and **180**, have multi-site with multi-sub-site capability. In one embodiment, each site is assigned a specific currency. With reference to FIGS. **12A-12B**, in one embodiment, the casino system gaming network is a multi-level casino network design, with the bottom layer including casino floor gaming machines, and the middle level including a casino service layer, and a top layer including an enterprise server layer.

IVIEW Interface Software and Hardware

In one embodiment, the software and media types on the IVIEW interface **216** include but are not limited to the following: Windows CE® or Windows XP® embedded software, Dot Net Compact Framework® 2.0 or higher, Java® applets, Java® Applications, Java® Midlets, HTML, DHTML, JavaScript®, Macromedia® Flash®, animated GIF, JPEG, BMP, PNG, C# applications, Visual Basic.Net® applications, Internet Explorer®, XML, ASPX, ASP, Shockwave®, and VBScript®, Windows® Forms. The client side game system on the IVIEW interface **216** is capable of playing, for example, and not by way of limitation, Java®, Shockwave®, Flash®, C#, C++, Visual Basic® games. With reference to FIGS. **13A-13B**, block diagrams illustrate the relationship between client hardware and software, and the system gaming servers according to one embodiment.

FIGS. **14A-14D** are block diagrams illustrating components of a unified IVIEW/GMU board and software according to one embodiment. In the embodiment of FIGS. **14A-14D**, the Integrated GMU/IVIEW board is provided in addition to their NT board and a System Data Service **250** board. This board serves as the Display Processor and PIN pad interface. All of the GMU **218** functionality is moved into the Integrated GMU/IVIEW board of FIGS. **14A-14D**, including the function of monitoring the base game **202**, meters, and the like.

According to one embodiment, the tournament gaming system includes a management console. In various embodiments, the management console is a computer, laptop, or other player terminal that is in communication with a tournament gaming server. FIGS. **15-29** illustrate various screenshots of the management console. The management console provides a user display and user interface to configure and manage one or more tournament games. For example, FIG. **15** illustrates a screenshot of a home page of the management console presenting listings of all the running tournaments, pending tournaments, suspended tournaments, scheduled tournaments, and tournaments pending approval. Each of the listed tournaments includes further information such as, but not limited to, a tournament name, type of tournament (e.g., time based or fixed number of players), start time (e.g., date and time), end time, number of entrants into the tournament, and total prizes. Additionally, from the home page, the user may navigate to other pages such as, but not limited to, a tournament wizard page (to configure a tournament game) or a finished tournaments page, player management page, global signage settings page, global settings page, tournament reports page, or a security page.

FIG. **16** is a screenshot of a tournament creation wizard, specifically a "tournament details" page of the tournament

creation wizard. The tournament creation wizard page allows a casino administrator to create a new tournament, create a tournament using an existing tournament, and edit an existing tournament. The tournament creation wizard page also includes the following tabs to pages that allow casino administrators access tournament details, parameter values, eligibility rules, scoring methods, progressive prizes, winnings, and signage settings.

As shown in FIG. **16**, the "tournament details" page is shown. The "tournament details" page provides a plurality of fields that allows a casino administrator to create or modify the display name of the tournament game, working name, tournament game, tournament type, and cost to play the tournament game. The "display name" field represents the name of the tournament game shown to users on the IVIEW display, gaming machine, and signage. The "working name" field presents a tournament name that is used internally (i.e., a name for the casino administrator to use for configuration and reporting reasons). The "tournament game" field represents the specific tournament game that will be presented to the player. In one embodiment, the field includes a drop down menu of all the possible games that can be presented as a tournament game. As shown in FIG. **16**, the "Blazing 7s Challenge" is selected. In another embodiment, the casino operator may select a "Casino Challenge" game. As those skilled in the art will appreciate, any type of casino game may be presented as a tournament game. In one embodiment, the game selected in the tournament game field is presented on the IVIEW display of a gaming machine. Alternatively, the tournament game is presented on a main or secondary display of the gaming machine. The "tournament type" field allows a casino operator to configure the type of tournament game. For example, the tournament game may be a time-based (e.g., specific duration) or limited entry (i.e., fixed number of players). In one embodiment, the field includes a drop-down menu of all possible tournament game types, as disclosed herein. The "cost to play" field allows a casino operator to establish the number of "play points" (e.g., a play point or entry point is a percentage of the money wagered on the gaming machine) or cash equivalent required for a player to earn in order to qualify for the tournament game.

FIG. **17** is a screenshot of the "parameter values" page in the tournament creation wizard. The "parameter values" page includes fields for configuring the start date of the tournament, the number of times the tournament is repeated (e.g., one time, X number of times, or an unlimited number of times), the duration for each tournament (e.g., in days, hours, minutes, or a combination thereof), and the duration of any intermission (e.g., in days, hours, minutes, or a combination thereof) between starting up subsequent repeat tournaments.

FIG. **18** is a screenshot of the "eligibility" page in the tournament creation wizard. The eligibility page allows the casino administrator to establish which casino player types (i.e., player card holders) are allowed to play any tournament game. As shown in FIG. **18**, Silver, Gold, or Platinum level members may be eligible to play a tournament game. Additionally, a player list (e.g., group of players) may be imported into this application. According to one embodiment, if a player has been assigned to be able to play a specific tournament, the tournament will be selectable on the iVIEW for this player after they have carded into the device. Alternatively, an eligible player (e.g., gold, silver, platinum, or player list) will be allowed to play a tournament game if they earn a sufficient number of tournament entry points.

In addition to setting eligibility requirements, other events may be used to initiate a tournament game. In one embodiment, the triggering event is a computer or system generated response such as, but not limited to, a message from a system host, a message from another networked gaming machine, or a winning outcome in a primary game. For example, the triggering event may be a symbol combination of "cherry-cherry-cherry" for a slots-type game. In a poker game, the triggering event may be a pair of jacks or better. In other embodiments, the triggering event may be any winning outcome having a low or high probability. In those embodiments where a gaming machine presents both a primary game and a secondary game, the triggering event may be an outcome in either the primary or the secondary game. The primary game and/or the secondary game may be a video game or a mechanical game (e.g., a game having one or more reels or wheels). As those skilled in the art will appreciate, the triggering event may be any possible game outcome and does not necessarily have to be a winning outcome.

Additionally, triggering events (or eligibility requirements) may be based upon player activity/actions. For example, the triggering event may be based upon player performance such as, but not limited to, time of play, frequency of play (i.e., number of games played in a particular period of time), number of maximum bets, number of player points earned, or a combination thereof. Additionally, a triggering event may be the player possessing a radiofrequency identification (RFID) tag while playing a gaming machine or walking by one or more gaming machines to trigger an attract mode of a game. In these embodiments, a random performance characteristic may be selected to initiate a tournament game. For example, a tournament game may be triggered when a player has played the game for 30 minutes. Alternatively, achieving a predetermined performance threshold for a particular performance characteristic may be required to initiate the tournament game. For example, a tournament game may be initiated when a player has made twelve maximum bets. In another embodiment, the triggering event may be based upon the number of credits on the gaming machine. That is, a random or predetermined number of credits will trigger the bonus period.

FIG. **19** is a screenshot of the "import a player group or use existing group" page in the tournament creation wizard. This page allows a casino administrator to generate a specific list of players eligible to play a tournament game. For example, a list of players that consist of a special group of visitors, such as a bus group, may be eligible to play a tournament game. The defined list of patrons and their player card numbers can be imported into the application. As shown in FIG. **19**, a drop down menu allows a casino administrator to select existing player groups or the administrator can create a new player group by adding individual players or merging different groups together.

FIG. **20** is a screenshot of the "Add/Edit Player Group" page in the tournament creation wizard. On this page, one or more players may be added to a new or an existing player group. The specific group of players may be defined, imported, and linked into a new player group. The group may be assigned to any tournament (existing or currently being configured). As shown in FIG. **20**, players may be added from a file that is a list of each player's first name, last name, and player card number. The list of available players that may be used to form a new group or added to an existing group is shown at the bottom of the screen. The current player shows the individual players that are part of the group (e.g., Bally BUS Group 15).

FIG. **21** is a screenshot of "Add/Edit Player Group" page in the tournament creation wizard. In this page, a specific individual player may be added to a running tournament or an existing group (e.g., Bally Bus Group 15).

FIG. **22** is a screenshot of the "Scoring method" page in the tournament creation wizard. The fields in this page allow a casino administrator to define the scoring methodology for a tournament game. The player's score may be based upon the score the player achieves after playing the tournament game for a defined period of time or after a certain number of games. If the player's score is based upon the number of games, a field on this page allows a casino administrator to define the number of base games to play. As shown in FIG. **22**, a casino operator needs to select a minimum of five games. However, those skilled in the art will appreciate that any minimum number of games may be required. Once the tournament "conclude rule" (i.e., playing a defined number of games or for a particular duration) is satisfied, the player's tournament score is frozen and his/her tournament score entry is complete. The tournament score is then judged for prizes at the conclusion of the tournament.

FIG. **23** is a screenshot of the "Progressive Prizes" page in the tournament creation wizard. The "Progressive Prizes" page includes one or more fields that allow a casino administrator to configure progressive prizes for the tournament game. The progressive prize may be a progressive cash prize, a progressive bonus point prize, or a combination of both a cash and bonus point prize. The progressive cash prize component includes fields for a start value and a progressive increment value per tournament game entry. Likewise, the progressive bonus point prize component includes fields for a start value and a progressive increment value per tournament game entry. These progressive prizes would be shown to the player on the iVIEW and on overhead signage throughout the casino properties.

FIG. **24** is a screenshot of the "Winnings" in the tournament creation wizard. The "Winnings" page includes a plurality of fields for configuring prize allocation to the winners of a tournament game. The fields define the prize allocation by the number of winners (i.e., winning positions) and the allocation of cash and bonus points for each winning position. The cash component of a winning position may include a fixed cash value and/or a percentage of a progressive cash pool. Likewise, the bonus point component of a winning composition may include a fixed bonus point value and/or a percentage of a progressive bonus point pool. As shown in FIG. **24**, winning position **1** would receive a fixed cash award of $10, 40% of the cash progressive pool, and 40% of the bonus point progressive pool) for a total prize value of $15, and winning positions 2-4 would each receive 20% of the cash progressive pool and 20% of the bonus point progressive pool for a total prize value of $2.50.

FIG. **25** is a screenshot of the "Review and Commit" page in the tournament creation wizard. This page summarizes all the configurations established for the tournament game prior to committing this tournament game to the database. As shown in FIG. **25**, the "Review and Commit" page includes the following: tournament name, tournament type, tournament cost (i.e., cost to player to play the tournament game), tournament repeats, duration, tournament eligibility rules, tournament progressive cash portion, tournament progressive bonus points portion, tournament winnings, tournament scoring method, and tournament schedule details. The tournament game has a multiple signoff authorizations by casino administrators that have the proper level of access. Once these signoffs are complete, the tournament can go live to the casino floor. Additionally, this page provides the option for the casino administrator to go back and edit the created tournament game.

FIG. **26** is a screenshot of the "Signage Settings" page in the tournament creation wizard. This page includes a plurality of fields to configure presentation of tournament game information on an establishment's overhead signage or other signage located through the establishment. The tournament game information includes, but is not limited to, a leader board including the title of the tournament game, the prizes available for winning positions, rank of players (i.e., leader board), time remaining in the tournament game, number of entries remaining, or a combination thereof.

As shown in FIG. **26**, a check box field provides a casino administrator with the option to never display a tournament game on the signage. For example, tournament game information would not be broadcast throughout a casino if the tournament game is limited to a few players or the prize values are deemed too low. Additionally, a check box field entitled "Ignore Minimum Prize Limitation" will override the minimum prize size rule. The minimum prize rule establishes that tournaments having a prize value under a predefined amount of total prizes will not be shown on signage throughout the property. As shown in FIG. **26**, the "minimum total prize value" is shown under the "Global Signage Settings" tab and is defined as a total of 1 unit.

The "Maximum Completed # Instances to Display" field allows a casino administrator to define the maximum number of tournament games that may be presented on the signage at one time. As shown in FIG. **26**, for example, the casino administrator has elected to show a maximum of three tournaments at a given time on the signage even though there may be more than three tournaments running at the time.

The "Signage Settings" page also includes a "tournament data display duration in seconds" field that defines the length of time any given display is presented on the signage. As shown in FIG. **26**, the casino administrator may enter a duration in seconds. Alternatively, the duration may be selected via a drop down menu or by selecting a check box associated with a particular duration (e.g., 30 seconds, 60 seconds, or 90 seconds).

Additionally, the "Signage Settings" page provides data fields to make changes to "Global Signage Settings." For example, the results of completed tournament games may still be presented for a period of time. As shown in FIG. **26**, the "Time Back" field allows the signage to display results of tournament games from the last 15 days. The "Time Forward" field allows the casino administrator to present tournament information for upcoming tournament games that have yet to start. Both the "Time Back" and "Time Forward" fields may configure in days, hours, minutes or a combination thereof. Under the "Global Signage Settings" portion of the "Signage Settings" page, the casino administrator establishes whether completed tournaments, scheduled tournaments, and active tournaments are displayed on the signage. Additionally, the "minimum total prize value" and "maximum number of winning positions" may also be defined.

In yet another embodiment, the signage settings allow for the assignment of specific tournament game information to be presented on certain signs on the casino floor. For example, tournament game information is shown on signage in proximity to certain players actively playing tournament eligible games. That is, the display content presented on the signage throughout a casino establishment may be targeted to active players, eligible players, or uncarded players with the desired result of generating player interest or increasing player awareness of tournament games in which the player is/was a participant or an eligible participant.

FIG. **27** is a screenshot of the "Player Alias Setup" page of the Player Management section of the Tournament Management Console. In the Player Management section, the casino administrator is able to add/edit a player group, setup player

aliases (as shown in FIG. **27**), and manage player aliases. On the "Player Alias Setup" page, a casino administrator may establish a player alias for a particular player card. The player alias is displayed on the overhead signage (e.g., on a leader board) and/or the iVIEW device in lieu of the player's real name. The player alias setup page allows a casino administrator to find a player account (via a player card number) and lists all the player aliases associated with the player card number. Additionally, the status of the alias is provided. As shown in FIG. **27**, the player card number may be associated with five aliases. The aliases may be created by the player or selected by the player (i.e., selecting an alias from a list of default aliases). In FIG. **27**, the player has created two alias names and has selected three default aliases. The default aliases consist of portions of their last name (up to 6 letters), first name (up to 4 letters), and player card number (last 4 #s), and a counter from 1 through 5. The default format for the aliases is as follows: last6_first4_card#last4_counter (1-5). The default alias provides a completely unique alias that is easily identifiable by the player yet the player remains anonymous. On the player alias setup page, aliases for a player card may also be edited. For example, as shown in FIG. **27**, the player's third alias has been modified from a default alias to a new alias "Gold."

In one embodiment, the setup of the player alias may be done at a casino club desk. The player is asked for an alias which is associated with the player account. Alternatively, the player may input an alias at the gaming device (e.g., via an iVIEW device) or select an alias from a list of default aliases. According to one embodiment, the player is able to use different aliases for different gaming sessions (e.g., a first alias for the first gaming session, second alias for the second gaming session). In this embodiment, the player is able to play multiple tournament games (on different slot machines) and use the same player card and uniquely identify him/her on the leader boards of the tournament games. Additionally, with multiple player aliases, the player may compete against his previous score in the same tournament.

FIG. **28** is a screenshot of the "Tournament Scores by Player" page in the Tournament Reports section of the Tournament Management Console. On the "Tournament Scores by Player" page, a report for a player may be generated by entering a player card number and defining a time in which the tournaments may have been played. Additionally, other types of tournament reports may be generated. These reports include Tournament Reports by Player, Tournament Transactions by Player, Winners List by Player, iVIEW summary, Tournament Change History, Tournament Instance Change History, Transactions by Tournament Instance, Player Groups List, Tournament Profitability, Average Velocity by Tournament (i.e., how quick the tournament turns over), Tournament Velocity by Tournament Instance, and Player Group Activity.

FIG. **29** is a screenshot of the "Tournaments Global Settings" page that provides default settings, current settings, and updates of the settings. One global setting is configuring tournament games for automatic play. In the automatic play setting, the tournament automatically starts when the player has achieved a sufficient number of play points to qualify for the tournament game. Another global setting is setting a delay duration (in seconds or any other time unit) prior to automatically starting the tournament game. Yet another global setting is establishing the number of tournament records to display on the statistics (stats) page for each tournament. According to one embodiment, the stats are presented on the iVIEW display. In other embodiments, the stats are presented on a main, secondary, or dedicated display of the gaming machine. As shown in FIG. **29**, a player will be able to review the last ten tournaments in which the player was a participant.

FIG. **30** is a screenshot of tournament game information for a "Big Points Tournament" that is presented on one or more signs located throughout a gaming floor. The screenshot includes a leader board for a limited entry tournament game (i.e., fixed number of people). On the leader board, the top three scores are identified by the player alias. As shown, the first and second place players are identified by their default player alias, and the third place player is identified by a unique alias provided by the player. As additional "Big Points Tournament" games are played, the leader board may be further populated and the rank may also change. Additionally, the first three places are awarded player club points in the amount of 10,000, 5,000, and 1,000 points. Additionally, the leader board provides additional information about the "Big Points Tournament." For example, players on the G2E player list are eligible to qualify for the "Big Points Tournament." That is, player eligibility is limited to an invited group of players rather than all the players from a traditional player's club group. Under the "Status" field, the number of available entries (i.e., slots) into the tournament game is presented. As shown in FIG. **30**, there are forty slots available to play the "Big Points Tournament," and as additional players qualify and play the tournament, this number will decrease. The "End" field discloses the event that completes the tournament game. In the "Big Points Tournament," the tournament ends when the fortieth player completes the tournament game. Once the tournament closes, the top 3 players in the "Big Points Tournament" split the total of the club point prize (of 16,000 points) according to their rank.

FIG. **31** is a screenshot of tournament game information shown on signage located on a casino floor. Like the screenshot shown in FIG. **30**, the tournament information includes a leader board, tournament name (Daily for All), eligible players (Gold and Platinum player club cardholders), status (open), end time, type of tournament game (time based), number of winners (2), total amount of cash and points awarded at the conclusion of the tournament ($2,258.00 and 15 points, respectively). Additionally, the tournament information includes the notice that the payouts are progressive. Accordingly, at the conclusion of the "Daily for All" tournament, the top two players win and split the total prizes weighted to their rank. As shown in FIG. **31**, the player identified as "Jeffrey_T__2534" is winning both prizes, but the tournament is still open, and this player may lose one or both rank positions by the end of the tournament.

FIG. **32** illustrates another screenshot of tournament game information shown on signage located on a casino floor. The "Happy Day" tournament is a day long tournament for 3 player club levels (Gold, Platinum, and Silver). The tournament has a total progressive cash prize of $500 that is divided amongst **10** winning scores (i.e., a fixed cash prize with the top two players getting $150 each and the remaining 8 top ranked players get a fixed $25 each).

FIG. **33** is a screenshot of the iVIEW tournament selection page for a specific player. When a player inserts a player tracking card, enters a PIN number identifying a player club account, or the player places a personalized RFID tag near the gaming machine, the tournament selection page is presented to the player on the iVIEW display. Once the player is identified, the player alias, John_L__01473, is presented on the iVIEW display. On the iVIEW tournament selection page is a list of active tournament games available to the active player. Each tournament listed on the display is identified by the tournament type (time based or limited entry). Additionally, the selection display includes a "cost to play" field that iden-

tifies the required player reward level to play one or more of the listed tournament games. As shown in FIG. **33**, the player is at reward level **1**, and the player is eligible to play the "Daily for All" tournament. Alternatively, the player may play the base game and earn higher reward levels to play the other active tournament games. Additionally, the iVIEW selection page presents the associated prizes for each of the active tournament games. Furthermore, the "Daily for All" and the "Dennis Spl" include arrows next to the prize amount which signify that there is a progressive associated with these two tournaments. As those skilled in the art will appreciate, different symbols may be used to signify a progressive. The absence of the arrow for the "test tourn" and the "5 min special" tournament games signify that the prizes are fixed prizes.

The iVIEW selection page includes arrows on the side of the display that allows a player to navigate up and down the list of available tournaments. The display also includes a "help," "menu," and a "view details" buttons. These buttons and arrows may be touch screen, touch glass buttons. As those skilled in the art will appreciate, other input means may be coupled to the display to actuate the functions of the buttons (e.g., soft key buttons provide around the periphery of the display).

As shown in FIG. **33**, the "Daily for All" tournament is highlighted. The player may select the "Daily for All" tournament by pressing the "view details" button which provides additional details on the highlighted tournament. FIG. **34** illustrates the details of the "Daily for All" tournament. The "view details" page provides the following information: the number of entries into the game (e.g., unlimited or fixed quantity); scoring rules (i.e., how your tournament score is determined); number of winners that will be awarded prizes (e.g., top three players); the cost to play the tournament game in the form of play points or reward levels; and the current leader board.

As shown in FIG. **34**, the current leader board provided on the "view details" page does not display the scores of the ranked players until the tournament game is actually played by the player. The score is not presented to the player because the gaming establishment does not want to discourage the prospective player from playing the tournament game. According to one embodiment, the "play" button will illuminate when the player has a sufficient amount of Play Points to qualify for play of the tournament game. The player is able to play the tournament game so long as the tournament has not expired or concluded.

FIG. **35** is a screenshot of the iVIEW tournament screen after the player presses the "Play" Button on the tournament details page. A "Joining Tournament" message is presented to the player and an "initiate tournament" is sent from the iVIEW processor to the tournament server. If entries remain in a limited entry tournament (or the tournament has yet to expire for a time-based tournament) and the player has enough play points his player account, the player is allowed to play the selected tournament. Otherwise, the player is notified that he will not play the tournament game because the tournament is closed (e.g., no available entries, tournament has expired) or the player does not have a sufficient number of play points to qualify for the tournament. Additionally, a message may be presented to the player to seek another tournament game. Alternatively, other tournament games may be suggested to the player having similar profile to the tournament the player selected to play.

FIG. **36** is a screenshot of the iVIEW tournament screen when the player is successfully entered into the selected tournament game. The player is presented with instructions (e.g., Play **20** base games to accumulate their tournament score).

Once the player begins play of the base game, the iVIEW display presents a screenshot of the iVIEW tournament game play screen as shown in FIG. **37**. The title of the tournament game the player alias is provided is at the top of the tournament game display screen. The iVIEW display also presents the player's score, estimated rank, and remaining spins (i.e., the tournament conclude rule). The leader board of the tournament game is also displayed. The current leader board is presented with rank, player alias, player posted score, and the current prize allocation.

In alternate embodiments, the player may be instructed to play the base or secondary game for a certain period of time. Once tournament game play is initiated, the iVIEW display presents the player's score, estimated rank, the leader board (including player aliases, scores, and prize for each rank position), and a clock or a countdown meter showing the remaining time for play of the tournament game.

Referring back to FIG. **37**, a "take score" button is also provided which allows the player the option to terminate play of the tournament game. This allows the player to prematurely end the tournament game and post the score at the time the "take score" button is activated. Alternately, removal of the player tracking card during play of the tournament game has the same effect as activating the "take score" button. In some embodiments, play for the tournament game will automatically continue even though the player card is removed. In any of these previously embodiments or at the conclusion of the tournament game, the player's tournament score is posted (i.e., transmitted and stored) to the tournament server.

Turning now to FIG. **38**, a screenshot of the "Game Over" screen for an iVIEW tournament game is shown. The player has completed play of the tournament game, and the final tournament score entry is displayed to the player. The tournament score is posted to the server for this particular tournament (i.e., Daily for All). If the player's score is large enough, the score is also presented on the leader board. At the conclusion of the tournament, the awards are automatically placed into the winning players' account.

FIG. **39** is directed to screenshots of the iVIEW tournament Choose Player Alias screen. This user interface allows a player to select one of either his default (i.e., automatically generated) alias names or an alias that is uniquely created by the player at the club desk or a web portal. Any active alias names in use on the casino floor (i.e., players playing with the same player card number) are shown to this player. The active aliases that are associated with the same player card number are blocked from being selected at this instance, because unique aliases must be used for multiple people playing tournaments at the same time on the floor with the same player card number. A player uses the "up" and "down" arrows to scroll through the list of aliases. An alias is assigned to the player for the current gaming session when the desired alias name is highlighted and the "select" button is activated. If successful, all remaining tournaments played this gaming session will use the selected alias. If the player is unsuccessful in selecting a player alias, a failure message is presented on the "choose a player name" screen as shown in FIG. **40**. Otherwise, if a player does not select a player alias, the first available alias will be automatically chosen for the player for the remainder of his gaming session.

Turning now to FIG. **41**, a series of screenshots of the multiple types of system games are presented to the player on the iVIEW display. The player is given the option to select one or more of these games for play when the player has earned a sufficient number of player points or has achieved a particular

player reward level. As shown in FIG. **76**, the player is presented with two tournament games (i.e., Blazing Seven's and Casino Challenge). Additionally, the player is provided with the two single player games (non-tournament games) that pit the player against the game and not other players. As those skilled in the art will appreciate, additional tournament games may be provided to the player or only tournament games are presented to the player on the iVIEW display. Additionally, any number of tournament games and single player games may be presented to the player on the iVIEW display. In another embodiment, different games (tournament or single player games) may be downloaded from the backend server to the iVIEW display.

FIG. **42** illustrates a series of screenshots for the Blazing 7's tournament game. This tournament game is presented and played on the iVIEW display. Alternatively, this game may be presented on a secondary display or a dedicated display on the top box of the gaming machine. Play of the Blazing 7's tournament game may be achieved by the following method. A player inserts his player card into the gaming machine and initiates play of a main game, which is not necessarily the same game as the tournament game. The player may also select a tournament game (e.g., Blazing 7's tournament game) that the player desires to play. As the player wagers on the base game, the player earns play points, which are used to earn play of the Blazing 7's tournament game. If the player does not have a sufficient number of play points, the Blazing 7's tournament game (on the iVIEW display) is blocked on the left side of the screen by a graphic. The graphic notifies the player to continue play of the main game in order to earn the right to play this tournament game. According to one method, as play of the main game continues, the graphic will slide down based upon the percentage of play points the player has earned as compared to the cost of the Blazing 7's tournament game. Once the player has earned enough play points to fund this tournament game, the graphic appears as a "Press to Play" button.

As shown in FIG. **42**, the iVIEW display also presents tournament information. The tournament information includes the tournament name (e.g., 5 Spin Hourly), the total available prize (e.g., $217.61), the tournament conclusion rule (i.e., tournament ends at a particular time of day or after a certain number of players have played the game), and the score rule (e.g., the number of spins of the Blazing 7's iVIEW tournament game that are used to generate a final score). The "Pays" button on the iVIEW display links to a view the current leader board for the Blazing 7's tournament game. The "More" button links to a view of other types of Blazing 7's tournament games available for to the player. For example, other types of Blazing 7's tournament game may be an hourly, daily, or 50 person tournament game. Additionally, if the player has previously played a particular tournament game (e.g., 10 Spin Daily), the "more button" may also present the player's results from previous tournament game. The player's previous results page may include, but is not limited to, the following information: player alias, time tournament ended, rank, and prizes.

FIG. **43** illustrates a series of screenshots of the Blazing 7's tournament game in progress. The first screenshot shows an intermediate "joining tournament" page after the player presses the "Press to Play" button. At this time, if the tournament is still open, the tournament entry is logged at the server and the Blazing 7's game is shown to the player on the iVIEW display. The player presses the "spin" button a predefined number of times until the "Spins Left" window reads zero. According to one method, the player presses the spin button on the primary game to spin the reels in the Blazing 7's tournament game. Alternatively, the player may press the virtual button on the iVIEW display to spin the reels. In yet another method, the reels are spun automatically. After each spin of the reels for the Blazing 7's tournament game, the player's score is generated and presented to the player. At the conclusion of the game, the final score is presented to the player, and the final score is posted to the tournament server. The final is the cumulative score from any winning combinations for each spin.

According to one embodiment of the tournament game, at any time during play of the tournament game, the player may touch the screen (e.g., touch reels or a pays button (not shown)) to reveal a tournament game paytable. Touching the paytable or a "back" button (not shown) will cause the iVIEW display to revert back to the tournament game.

In yet another embodiment of the tournament game, game play of the tournament game will continue even though the player has removed his player tracking card in the midst of play of the tournament game. The final score is tabulated and posted to the server even though the player has ended his gaming session or removed his player tracking card. As a result, the player is given the best possible change to achieve the highest score for a given tournament entry. After posting the final score to the server, the iVIEW display will revert to an attract mode, and the player's iVIEW tournament game session is closed.

In another embodiment of the tournament game, the player is given the option to automatically play all spins of the tournament game. This relieves the player of the need to initiate spins for the tournament game. As a result, the player is able to continue play of the main game while the tournament game is automatically played.

FIG. **44** illustrates a series of screenshots of a "game over" sequence for the Blazing 7's tournament game. The "game over" sequence is initiated when the Spins Left equals zero. According to one embodiment, the player actuates a "continue" button to view the "results" page. Alternatively, the "results" page appears on the iVIEW display a few seconds after the tournament game has ended. The "results" page presents the following information to the player: tournament name; the player's final score; tournament conclusion rule or end time; and a message that the player will be automatically awarded prizes to his player account if the final score is a winning score. According to one embodiment, the current leader board is then displayed on the iVIEW display. In another embodiment, the player is shown the top scores in the tournament, his best score, and the scores of players just above and below their best score entry. By presenting scores near the player's best or final score, the player has the impression that he is competitive with other players even though his score is not a top ranked score. After the "game over" sequence is complete, the player is given the option to choose the next tournament game to play (e.g., the same or different tournament game). In some embodiments, the player is able to replay the same tournament game (so long as the player is eligible) until the tournament concludes. Alternatively, in some embodiments, the tournament game only allows for a limited number of entries for a particular player card account.

FIG. **45** illustrates a series of screenshots for another embodiment of a tournament game, entitled Casino Challenge that is presented on the iVIEW display. In one embodiment of the Casino Challenge tournament game, base game wagers or wins are shown to determine a player's normalized tournament score. That is, the base game of the gaming machine is reconfigured to operate as a tournament game and will revert back to a normal game once the tournament session has ended. The user interface for the Casino Challenge game

is similar to the user interface disclosed for the Blazing 7's tournament game as shown in FIG. **42**.

FIG. **46** shows a series of screenshots of the Casino Challenge tournament game on the iVIEW display. As shown in FIG. **46**, the player has earned enough to play a specific Casino Challenge tournament game and presses the "Press to Play" button. The tournament game request is joined at the tournament server. According to one method, the player initiates play of the tournament game by pressing the "Spin" button on the iVIEW display. Alternatively, game play is initiated by pressing a "spin" button on the primary game to begin the tournament game. According to one embodiment, the IVIEW display presents a leader board, the player's tournament score, the number of base game spins remaining, or the time remaining to play the base game. By selecting the PAYS button on the IVIEW display, the current leader board and potential payout for each of the ranked players is displayed on the IVIEW display. As the player plays the base game in tournament mode, the base game information including, but not limited to, the base game wagers, wins, and theoretical payout percentages are transmitted to the tournament server in order to calculate a normalized tournament score for the base game. As previously discussed herein, the tournament server includes an algorithm to calculate a normalized tournament score for base game play. The normalized tournament score is transmitted to the IVIEW display for presentation to the player. As shown in FIG. **81**, the leader board shows both active players playing the same tournament game on the gaming floor and the final tournament scores that have been posted to the server.

In one embodiment, a player may "take a score" even though the player still has spins remaining in the tournament game. In this event, the tournament score posted to the server is based upon the score at the time the player terminates the tournament game. By prematurely ending the tournament session, a player is not achieving the highest score possible, and the player still has a chance to win a tournament prize. In another embodiment, the player may pause the tournament game and resume the game at a later time. In this embodiment, the tournament game is stored and is associated with the player account. At a later time, the tournament game may be recalled and tournament game play is resumed.

In yet another embodiment of the tournament game, game play of the tournament game will continue even though the player has removed his player tracking card in the midst of play of the tournament game. The final score is tabulated and posted to the server even though the player has ended his gaming session or removed his player tracking card. As a result, the player is given the best possible chance to achieve the highest score for a given tournament entry. After posting the final score to the server, the iVIEW display will revert to an attract mode, and the player's iVIEW tournament game session is closed.

In another embodiment of the tournament game, the player is given the option to automatically play all spins of the tournament game. This relieves the player of the need to initiate spins for the tournament game. As a result, the player is able to continue play of the main game while the tournament game is automatically played.

FIG. **47** illustrates a series of screenshots of the "game over" process for the Casino Challenge tournament. In FIG. **47**, the player's final score (9,959 points) and ranking (#5) are presented on the IVIEW display. As shown in FIG. **47**, the player is shown the scores of the players ranked just before and just after him or herself. Additionally, the top ranked scores are shown on the IVIEW display. In one embodiment, a "results" page presents the following information to the player: tournament name; player's alias; the player's final score; tournament conclusion rule or end time; and a message that the player will be automatically awarded prizes to his player account if the final score is a winning score. If the player's final score is a highly ranked score, the player's alias, final score, and prize may be displayed on tournament signage throughout the property. After the "game over" sequence is complete, the player is given the option to choose the next tournament game to play (e.g., the same or different tournament game). In some embodiments, the player is able to replay the same tournament game (so long as the player is eligible) until the tournament concludes. Alternatively, in some embodiments, the tournament game only allows for a limited number of entries by a particular player card account.

FIGS. **48**A-**48**B represents one embodiment of a tournament gaming system. A tournament server is at the hub of the tournament gaming system. The tournament server is a device-independent server that supports a plurality of tournament games. For example, the server runs tournament games on dedicated tournament gaming machines which are roped off from other gaming machines on a casino floor. According to one embodiment, the dedicated machines are Bally Alpha platform gaming machines as disclosed in U.S. Pat. No. 7,278,068, which is hereby incorporated by reference.

Additionally, as shown in FIGS. **48**A-**48**B, the tournament server is able to run tournament games on electronic gaming machines that normally present a base game. The base gaming machine will reconfigure itself to allow for a tournament game to be based off the results of the base game of the gaming machine. These base game tournaments are on-demand, because the player may self-initiate a tournament game.

In the base game section of FIGS. **48**A-**48**B, some machines in the bank of gaming machines are in normal mode and some are in tournament mode. The tournament system is capable of allowing a single gaming device to reconfigure into tournament mode for a single player. The player is then able to play the tournament and post his tournament score. Once the tournament is completed, the gaming machine is reconfigured back into normal mode. According to one embodiment, a bank or group of gaming machines may be reconfigured at one time into a tournament mode by a casino administrator. Alternately, gaming machines may be individually reconfigured into a tournament mode (e.g., gaming machines are reconfigured as gaming machines become idle or player gaming sessions end).

Furthermore, as shown in FIGS. **48**A-**48**B, the tournament server allows for tournament game play on an IVIEW display. The tournament game is presented and run on the IVIEW display which allows for concurrent play of the base game and the tournament game. Moreover, the tournament server is able to run and manage tournaments for various mobile devices throughout the casino, and the tournament server may run tournaments for web portal-based gaming.

FIG. **49** is a network diagram of one embodiment of the tournament gaming (Live Rewards) system. As shown in FIG. **49**, the network diagram illustrates how the client side is configured together with the server side of the system. Additionally, the network diagram illustrates how the slot management system and CMP/CMS systems are linked to the tournament gaming (Live Rewards) server.

FIGS. **50**A-**50**B illustrate the various components for the tournament server (e.g., tournament parts and tournament logic). The components include the basic specifications for various tournament types, a score table, other tournament actions, locations where the tournament score may be posted, tournament actions, rules for other tournaments posting to a

particular tournament, tournament sequence after a score is posted, and the end of tournament sequence.

FIGS. **51**A-**51**B show the various hardware components and communication links to an iVIEW display, EGM (electronic gaming machine), the tournament web services, casino signage, and the tournament database. FIG. **51**A-**51**B also illustrate the flow of the "Begin Game" and "End Game" processes. The "Begin Game" process is initiated by a player pressing a "play" button in a browser window on a gaming machine. Steps 2-8 are directed to the various communication processes that occur between the servers, signage, and the gaming device presenting the tournament game.

FIGS. **52**A-**52**C illustrate one embodiment of a tournament gaming architecture. Specifically, FIGS. **52**A-**52**C illustrate the communication protocols used between the servers and various components in a gaming machine. As shown in FIG. **52**B, a single browser manager can manage browser clients on nearly all platforms on the casino floor including iVIEW, the EGM, and the Casino Signage by using a common protocol.

FIGS. **53**A-**53**D illustrate a database schema of the tournament server showing the various tables and associations amongst the various tournament parts.

FIGS. **54**A-**54**B are process flow drawings for an event-based floor tournament illustrating the steps to create and run a floor tournament. According to one method, the gaming establishment creates an invitation list of players for the tournament and determines tournament prizes. Invitations to the tournament are sent to players typically through the mail, email, text messaging, instant messaging, or a combination thereof. The tournament is configured at the tournament management console application, and the player list is imported into this application. Prior to the scheduled tournament event, an area of the gaming floor including a plurality of gaming machines is roped off. The selected electronic game machines (EGM) are then reconfigured for tournament play by the tournament management console. Arriving players are registered by the tournament host. At this time, the player selects a player alias name of his choosing. Alternately, the player is assigned a player alias. Players are issued a tournament enrollment voucher and are typically notified of a scheduled time to play the tournament game. At the scheduled time, the player is randomly assigned a tournament EGM, or the player may select from any available EGM in the tournament bank (i.e., the roped off area). The player inserts the tournament enrollment voucher into EGM, which binds the player to the EGM. That is, the player's alias, patron ID, and tournament ID are associated with the EGM. In this scenario where the tournament EGM is randomly assigned to the player, it is at this point that the enrollment voucher is confirmed to match the designated tournament EGM. If there is a mismatch, then the enrollment voucher is returned to the player, and the enrollment process is aborted. The player then plays his tournament game to generate a tournament score. The tournament is either a group start for all players this session or the player plays for a specific amount of time or game plays on his/her own. If the tournament is configured for a group start, then the spin button or play buttons on the EGM's are disabled prior to receiving the group start command from the tournament session server. Overhead signage shows the tournament leader board.

FIG. **55** is a process flow diagram for STEP **1** of FIG. **54**A. In one embodiment, invited players are assigned to specific electronic gaming machines (EGMs). In alternate embodiments, a player may randomly select any tournament-capable machine on the casino floor. When the player inserts his tournament entry voucher, inserting his player card, or manually enters a tournament entry code into the EGM or a player tracking display, the gaming machine is reconfigured into tournament mode from normal mode. Furthermore, the gaming machine is configured for the specific tournament conditions that are appropriate for the invited player and his tournament ID. The tournament system is capable of associating a Player Patron ID, a tournament ID, a tournament session ID, a tournament voucher entry code, or a unique player alias name. When any one of these variables is sent to the tournament server, the tournament server is capable of instructing a Download and Configuration server to reconfigure the gaming device into the appropriate tournament mode.

Alternately, both conventional and tournament games are installed on the gaming machines. The conventional games are presented for play to any casino patron, and the tournament games are dormant. When the gaming machine receives a reconfiguration message, the tournament games are made available for play, and the conventional games are rendered dormant. With this type of gaming device setup, the Tournament protocol between the EGM and the Tournament server has the capability of setting the game ID, the conventional game mode, and the tournament game mode without having to go through the Download and configuration server.

FIG. **56** is a process flow diagram and a screenshot of a top monitor from an EGM for STEP **2** (see FIG. **90**) in a floor tournament. The top monitor is configured to display conventional game content or tournament game content when the EGM is reconfigured into the tournament mode. According to one embodiment, the top monitor content for the tournament mode is driven via a web browser running in the EGM, which shows content from a web server as part of the tournament system.

As discussed in FIG. **90**, the tournament player is bound to an EGM in one of the aforementioned ways. As shown in FIG. **56**, the player is shown the rules of the tournament and is instructed to wait for all other players in this tournament session. According to one embodiment, the player is given the option to say that he/she are ready to play the tournament by pressing a touchscreen button. A message is then sent to the tournament management console thereby notifying casino attendants that the player is ready to play the tournament. Accordingly, the casino attendants may synchronize the start the tournament for all players.

FIG. **57** is a process flow diagram and top monitor EGM screenshot for STEP **3** of a floor tournament. As shown in FIG. **57**, the player is in the middle of the tournament play. The current leader board is shown to the player during play. According to one embodiment, this data is shown on the top monitor of the EGM. Alternatively, the data is presented on an IVIEW display, a portion of the main display, or a display separate yet in communication with the EGM. As shown in FIG. **57**, the leader board includes the top five players, their player alias, the score, and a prize for each of the top five positions. Additionally, the active player's (BigSpender) score, rank, and prize for the rank position (i.e., $25 for seventh place) is also shown. The tournament conclusion rule (i.e., 20 spins) is also shown to the active player. As shown in FIG. **57**, the player has 14 spins left to play. In another embodiment, the tournament conclusion rule designates the time remaining to play the game. Alternatively, the tournament play continues until one player reaches a specific score or until all other players are eliminated by running out of their initially-given tournament credits.

FIG. **58** is a screenshot of one embodiment of the tournament management server. The tournament management server allows a casino administrator to create tournaments, view reports, check on the status of one or more EGMs, view

tournament prize inventory, and check for new tournament game titles available for play by querying the download and configuration server. The tournament management server includes a messaging system to enable various tournament staff to communicate with one another. The tournament management server also includes a system status of the various pieces of hardware and software pieces of the tournament system. Additionally, the tournament management server presents the currently running tournaments, scheduled tournaments, and closed tournaments. The tournament management server allows an operator to view and schedule tournaments at multiple casino sites. Each casino site may have its own tournament or a tournament may include two or more casino sites. Each actively running tournament status is shown with a progress indicator. The ability to pause and resume a running tournament is provided by the tournament management server. A tournament Wizard is provided to quickly allow casino personnel to configure new tournaments. EGM devices may also be configured from the interface of the tournament management server. Prize management is maintained at the tournament management server.

FIGS. **59**A-**59**B illustrate a flowchart of the various Tournament States that exist in the Tournament Magic Server. TOURNAMENT SETUP is the initial tournament magic service to the EGM or the game device handshake. The Tournament Magic obtains the tournament configuration data from the Tournament Management Server. The PLAYER SETUP is a process of the player data initialization using the Player card, tournament voucher code, by management console, or another player binding technique with the Game Device. The TOURNAMENT START is determined by checking the tournament start conditions as defined in the G2S tournament Class. Usually, the TOURNAMENT START is a manual group start from a tournament host application. In alternate embodiments, the TOURNAMENT START may be player initiated by pressing the start button or play button on the EGM. The BEGIN TOURNAMENT GAME step is next. The Tournament Game In Process is next. In this step, the Tournament Magic Server receives many base game start and game send events from various EGM's. The TOURNAMENT GAME IDLE process denotes that the tournament can be paused and resumed by the tournament management system even during the tournament play. The END TOURNAMENT GAME process occurs. Final scores are calculated. The tournament is allowed to begin.

FIGS. **60**A-**60**C illustrate an EGM and its software components in communication with other components in the EGM and in communication with the components in the secure network (e.g., the Secure Tournament Network servers with Tournament Web Servers, Browser Manager Servers, and the Bally Download and Configuration servers). FIG. **97** illustrates how many different servers can talk to separate client side applications and browsers to provide a secure tournament gaming product. Because the EGM has been converted from a conventional game into a tournament game, components such as the card reader are temporarily disabled. The GMU is still operating, but the meters associated with the GMU are static. Rather, tournament meters on the tournament server side are responsible for keeping score. Since the tournament game does not require the use of the GMU, any request for meters from the GMU is the same value during tournament game play. The GMU is left running to identify any tilt conditions (e.g., the EGM door has been opened).

FIGS. **61**A-**61**C are diagrams showing the multi-tier process in a pyramid style tournament. In TIER 1, a pool of 160 players play a tournament game in four groups of 40 on 40 roped off gaming machines. The top 20 players from each of the four groups advance to TIER 2. In TIER 2, the pool of 80 players from TIER 1 plays the TIER 2 tournament game. In this example, there are 40 roped off gaming machines thereby requiring two groups of 40 to play the TIER 2 game. The top 10 winners from the two groups then advance to TIER 3. In TIER 3, the winning players from TIER 2 play the tournament game to determine the top 5 winners. As those skilled in the art will appreciate, the number of roped off gaming machines, the number of TIERS, the winners per TIER, the total number of players eligible to play the pyramid-style tournament, and the number of final winners may be varied from that which is disclosed.

FIG. **62** is a tournament state diagram for one embodiment of the tournament gaming system. The tournament state diagram shows the various states of the game in a tournament mode (e.g., begin game, game in process, and end game) as well as the process of preparing an EGM for a tournament (e.g., preparation state, ready state, start state, in process state, end state and pause state). Additionally, FIG. **62** shows the communication events that occur in the preparation, ready, start, in process, and end states.

FIG. **63** is a screenshot of the Bally Alpha Tournament Session Manager Application (Sign Studio Display Status). This screen allows the overhead LCD signage status to be seen. When the EGM's are reconfigured into tournament mode, the overhead signage above the bank of EGM's is switched from normal signage mode to tournament mode screens. Each phase of the tournament has different screens that are presented to the players. All of the state information is shown on this page. The current Display Mode field shows whether the overhead signage is in one of two modes (the normal EGM mode-playlist or the Tournament mode). The URL of the Tournament mode content is entered here by casino staff. When the EGM's and the overhead signage are put into tournament mode, the normal SignStudio media is hidden from view, and a browser instance is shown. The browser will show the web page at the URL identified in the tournament URL field. This web page is the tournament leader board data and other data relating to running the floor tournament. When the EGM's are taken back to normal mode from tournament mode, the overhead signage returns to the default playlist.

FIG. **64** is a screenshot of the "Configure EGM Bank" page on the Bally Alpha Tournament Session Manager Application. On this page, the EGM's enabled for tournament play are listed (these EGMs have enumerated themselves with the tournament session server). The G2S tournament class has a means for the EGMs to announce to the servers that the EGMs have at least one tournament game available and are capable of being put into tournament mode. At this page, casino personnel implement the change of the EGM into the tournament mode. EGM's highlighted in yellow are those machines that cannot be put into tournament mode. These machines may not be put into tournament mode because there may be a communication error, the game is actively being played in normal mode, or the requested tournament pay table and denomination are not available on a specific EGM, the game is in TILT mode, or some other event that prevents this machine from being reconfigured into the tournament mode. At this page, the casino personnel are able to see which machines are having a problem going into tournament mode thereby allowing the casino to determine and resolve the problem with the EGM.

FIG. **65** is a screenshot of a "Configure Session Manager Details" page on the Bally Alpha Tournament Session Manager Application. On this page, specific game combinations, denomination, and the Pay table ID, are configured for a

tournament session. The data is transmitted to the EGM as part of the EGM's reconfiguration from normal play mode into tournament play mode. This Mgr Name text box allows the casino staff to uniquely name this session manager instance. There may be multiple session manager instances on the casino floor on the same or separate servers. For example there may be two banks of games configured for floor tournaments—one named Blazing 7's Floor Tournament and one named Black and White Floor tournament. These names would be sent to the master tournament administration host application that can view and manage these multiple instances of the tournament session manager application. The Admin URL is a text box for the operator to enter a Master Admin tournament server URL. This field allows the Bally Session manager to know where it will be sending to and receiving data from for its parent Master Admin tournament server URL. The data exchanged between the two servers is typically done using Microsoft MSMQ.

FIG. **66** is a screenshot of a "config" screen after a casino administrator clicks on the "Config" button on the "Configure Session Manager Details" page (as shown in FIG. **65**). On this page, a list of all available tournaments is shown with paytables queried from the EGMs connected to the tournament session manager through the G2S tournament class. Some EGMs may not have one or more of the Paytable (gamecombo's) shown in this list. When a user selects a specific paytable, the denominations available for this specific paytable are shown in the list box under denomination. The casino administrator selects one field from the paytable and denomination list boxes and establishes a tournament name for the selected configuration. The selected name is presented by the Master Tournament Admin Server to identify the paytable and denomination for the floor tournament session. The selected name also allows the details of the specific cabinet configurations (Paytable and denomination) to be hidden from the Master Tournament Admin server.

FIG. **67** is a screenshot of the "Configure Sign Studio Display" page on the Bally Alpha Tournament Session Manager Application. This page allows a casino administrator to view the available media content that is displayable on the overhead signage in a gaming establishment. A casino administrator may configure a playlist of media clips (and the order of the media clips) to be displayed on the signage in non-tournament mode. A URL of the tournament web server may also be entered on the "Configure Sign Studio Display." When the signage is placed into tournament mode, a browser is initiated over the media playing in the playlist. The browser is also set to navigate to this URL. This URL may be run at any server in the casino, multiple casinos, the Master Tournament server, the Bally Alpha Tournament Session server, or any other server.

FIG. **68** is a screenshot of the "Administrator Status Details" page on the Bally Alpha Tournament Session Manager Application. The Master Tournament Administration server URL is presented on the "Administrator Status Details" in the Admin URL field. The Current Status field identifies a parameter set from the Master Tournament Admin Server. The last time the Master Tournament Admin Server and the Bally Alpha Tournament Session Manager have communicated is shown. Also, the time that the communication link has been up and running is also displayed on this page. The "Administrator Status Details" page also allows for diagnostics to be shown for the two servers. According to one embodiment, the communication between the Master Tournament Server and the Bally Alpha Tournament Session Manager uses Microsoft MSMQ.

FIG. **69** is a screenshot of the "EGM Bank Status" page on the Bally Alpha Tournament Session Manager Application. The "EGM Bank Status" page includes a status screen for the EGMs that are tournament-enabled by selecting a specific paytable and denomination. As shown in FIG. **69**, the EGM ID number, the EGM ID, the EGM connection state, and a "Tournament-Enabled" flag is also displayed on the "EGM Bank Status" page. Those EGMs that cannot be put into this tournament mode are highlighted or otherwise identified on the screen. For example, as shown in FIG. **69**, the EGM Game Number 1 is properly reconfigured into tournament mode, and the EGM is enrolled and ready to accept tournament vouchers to bind a specific player to this tournament session. If an EGM is not tournament enabled, the EGM Config. Error details will show up in the field at the bottom of this page. The error details field provides the casino with the data needed to fix the EGM.

FIG. **70** is a screenshot of the "Session Manager Status Details" page on the Bally Alpha Tournament Session Manager Application. The following information is presented on this page: Current tournament state (Ready for tournament—no errors and ready for tournament voucher); EGM Connected Count field (number of EGMs having good connections to the Bally Alpha Session Manager); EGM Ready for Tournament field (number of EGMs ready for tournament play). These EGMs are properly reconfigured into the desired tournament mode; and the EGM Error Count (the number of EGMs that have problems being put into tournament mode is shown).

FIG. **71** is a diagram of the various components in one embodiment of the tournament gaming system. The tournament gaming system includes overhead signage (e.g., plasma display or other displays) connected to a sign studio on the session server. The tournament gaming system also includes a plurality of EGMs (each having a browser display for tournament mode) and an operating system (e.g., Bally Alpha platform). The session server includes a sign studio (in communication with the plasma display), web server (in communication with the browser displays on the EGM), session manager (in communication with an Admin server), and a session manager database (in communication with the session manager and the tournament operator kiosk). The tournament operator kiosk includes a session manager user interface and an admin user interface. The tournament operator kiosk is in communication with a kiosk display (e.g., plasma display or other displays). Tournaments are configured and run by casino personnel at the operator kiosk or station. Additionally, player registration may also be conducted at the operator kiosk or station. The Master Tournament Admin Server may have multiple Bally Alpha Tournament Session Servers attached to it running the same or different tournaments all together. The tournament Admin Server may be a Bally product or a 3rd party product such as, but not limited to, The Strategy 9 Corporation's Tournament Host Admin Application and server. According to one embodiment, the Sign Studio server may run on the same server hardware as the Session Server. In alternate configurations, the Sign Studio runs on separate hardware that is networked to the Session Server, which results in advanced display performance.

FIG. **72** is a tournament state diagram that the Session manager uses to advance from one tournament state to the next tournament state. As shown in FIG. **72**, the tournament states include conventional mode, preparation mode, disable mode, enrollment mode, play mode, and results mode.

FIG. **73** is a message flow diagram between the Tournament Session Manger and the Tournament Admin Server for a redirected connection and a directly accepted connection.

FIG. **74** is a message flow diagram between the Tournament Session Manger and the Tournament Admin Server during a player enrollment sequence. The Session manager gets the player ID from either the card reader on the gaming device, a tournament ticket that was inserted into the EGM that has a pre-associated PlayerID, or a casino patron ID. Once the player ID is established, the player ID is sent to the Master Admin Server for validation. If the user is authorized to play this session, the Master Admin Server responds with the PlayerID information such as Player Alias. In various embodiments, the PlayerID information is presented on the gaming device display, the player tracking display, the overhead signage display, the leader boards, or a combination thereof.

FIG. **75** is one embodiment of a tournament entry voucher given to the player by a tournament host. A tournament host application creates unique vouchers and associates the vouchers with a casino patron ID, tournament ID, and tournament validation code. According to one embodiment, the tournament entry voucher includes instructions such as "Please arrive 15 minutes prior to the start date/time for check-in." As those skilled in the art will appreciate, the tournament voucher may also include additional information or messages such as welcome message or additional instructions.

In order to enroll in a tournament game, the player enters the tournament voucher into the bill/ticket acceptor. Alternatively, the player enters a validation code number into the top box browser by manually entering the number or scanning the barcode on the tournament voucher with a barcode scanner attached to the gaming machine. The gaming device OS determines that the ticket validation code is a tournament voucher (and non-cash voucher), and the validation code is sent to the tournament server for authorization. If the validation code represents a cashless gaming ticket, the validation code is sent to a cash validation server. If a successful response is received from the Tournament server for the validation code, the player's alias (name) is shown on the Gaming device top monitor with the other tournament-related data. According to one embodiment, the tournament voucher is not stacked by the bill/ticket acceptor and is reissued to the player.

FIG. **76** is one embodiment of a tournament score receipt voucher that is issued to the player at the conclusion of tournament play. One or more of the following fields may be printed on the receipt voucher: the player's score total, the player Alias, the Game ID number, the time/day, and a validation code. According to one embodiment, players are required to present the voucher to collect an award. In another embodiment, the validation code is stored in a central tournament database along with other information such as, but not limited to, the player's ID.

FIG. **77** is a screenshot of tournament data that is presented to the player on the top box monitor or other display on the gaming machine. The tournament data is presented on the top box monitor after the machine has been configured into tournament mode and a player has inserted his tournament voucher into the gaming device. The tournament data that may be shown to the player includes a Welcome page, a tournament countdown page (time until they can start to play), a screen (e.g., display, animation, leader board, or the like) shown during the tournament, and a screen shown at the conclusion of tournament play.

FIG. **77** illustrates a screenshot that may be shown during tournament play. As shown in FIG. **77**, the top box monitor displays a current leader board, EGM seat # for each rank, player alias name for each rank, the tournament score for each rank, Session number, tournament title, and casino ID information. Additionally, the top box monitor displays a tournament start time and next session start time. As shown in FIG. **77**, an analog representation of a clock is presented on the right-hand side of the top box monitor to represent the time before a tournament starts or the time remaining to play the tournament game.

FIG. **78** illustrates the use cases for the tournament activity including the generation, delivery, and use of tournament related vouchers. The following outline provides a brief description of the various activities related to a tournament entry voucher received in the mail:

Marketing Tournament Entry Voucher Via Mail

1. Tournament creation: upon request from the marketing department, the tournament administrator creates a promotional or marketing funded tournament identifier and defines the period of availability, the prize, the eligible machine parameters, and the like.
2. Tournament entry vouchers generated: the marketing department is informed of the tournament identifier and associates it with a list of eligible patrons from the marketing database. The vouchers are generated with unique validation numbers, which are distinctly unique from cash vouchers, promotional vouchers, or any other barcoded ticket applications.
3. Delivery preparation: tournament entry vouchers are stuffed into addressed envelopes or otherwise prepared for delivery.
4. Delivery acceptance: the patron receives delivery of the tournament entry voucher.
5. Tournament contest begins: before the tournament contest begins, the state of the tournament is pending. At the starting period of the tournament contest, the status of all vouchers associated with the tournament identifier is set to the ready state.
6. Entry voucher status check: the patron arrives at the casino and checks the validity of the tournament entry voucher by inserting it into a kiosk or presenting it to casino personnel. The validity of the voucher is displayed to the patron on the kiosk or confirmed by casino personnel. Additionally, the status of the associated tournament contest is available.
7. Tournament session begins: the patron inserts the tournament entry voucher into a specified tournament-capable EGM. The voucher system validates the voucher, informs the tournament system of the event, triggering the tournament system to switch the EGM to tournament mode and begins the tournament session.
8. Tournament play: the patron plays the tournament game cycles on the EGM until the session is completed. During the play, the EGM and the tournament system track the progress of the tournament session.
9. Tournament session completes: at the end of the tournament session the tournament system communicates with the voucher system to generate a tournament results voucher. The tournament system updates its database by associating the voucher validation number with the results of the tournament session.
10. Tournament contest completes: the state of the tournament contest is changed to completed and the winners are determined by analyzing the tournament session results in the database.
11. Results voucher status check: when the patron checks the status of the tournament results voucher, he will be informed of his ranking within the tournament contest. In the event that the results correspond to a winning tournament session, the system will generate a tournament win voucher that is redeemable for the appropriate cash or prize.

The following outline provides a brief description of the various activities related to a tournament entry voucher purchased by a patron:

Tournament Entry Voucher Purchased by Patron

1. Tournament creation: the tournament administrator creates an entry fee funded tournament identifier and defines the entry price, minimum and maximum participants, period of availability, the prize, the eligible machine parameters, and the like.
2. Tournament entry vouchers purchased: the kiosk or casino personnel specify the tournament id to purchase and generate a tournament entry voucher. The vouchers are generated with unique validation numbers, which are distinctly unique from cash vouchers, promotional vouchers, or any other bar-coded ticket applications.
3. Tournament contest begins: before the tournament contest begins, the state of the tournament is pending. At the starting period of the tournament contest, the status of all vouchers associated with the tournament identifier is set to the ready state.
4. Entry voucher status check: the patron checks the validity of the tournament entry voucher by inserting it into a kiosk or presenting it to casino personnel. The validity of the voucher is displayed to the patron on the kiosk or confirmed by casino personnel. Additionally, the status of the associated tournament contest is available.
5. Tournament session begins: the patron inserts the tournament entry voucher into a specified tournament-capable EGM. The voucher system validates the voucher, informs the tournament system of the event, triggering the tournament system to switch the EGM to tournament mode and begins the tournament session.
6. Tournament play: the patron plays the tournament game cycles on the EGM until the session is completed. During the play, the EGM and the tournament system track the progress of the tournament session.
7. Tournament session completes: at the end of the tournament session the tournament system communicates with the voucher system to generate a tournament results voucher. The tournament system updates its database by associating the voucher validation number with the results of the tournament session.
8. Tournament contest completes: the state of the tournament contest is changed to completed, and the winners are determined by analyzing the tournament session results in the database.
9. Results voucher status check: when the patron checks the status of the tournament results voucher, he will be informed of his ranking within the tournament contest. In the event that the results correspond to a winning tournament session, the system will generate a tournament win voucher that is redeemable for the appropriate cash or prize.

FIG. **79** is a diagram illustrating the relevant network participants in a voucher-driven tournament scenario. As shown in FIG. **79**, a voucher server is in communication with a voucher database, marketing database, operator terminal, mailer printer, kiosk printer, and an EGM. The voucher server is in communication with a tournament server via a S2S (server to server) extension, and the tournament server is in communication with a browser manager server via a S2S extension. As shown in FIG. **79**, the browser server is also in communication with the EGM.

FIG. **80** is a tournament state diagram. The tournament sessions are controlled via a tournament sessionState that includes well-defined transitions. The tournament sessionState transitions included sessionEnded, sessionSuspended, sessionActive, sessionEnroll, and sessionIdle.

FIG. **81** is a diagram of a tournament segmentState. The tournament segmentState is a sub-state of the tournament sessionState, effectively providing detailed information about the segment while the tournament sessionState is 'sessionActive.' In the event that the tournament is suspended, the segmentState continues to reflect the state of the segment immediately before the suspension. If the segmentState is 'segmentPlaying' when the tournament resumes from suspension, then the segmentState will be forced to 'waitOnPlayerStart'. This causes the player to resume the segment from the point which the tournament session was suspended. All other segmentStates are unaffected when the tournament session resumes from suspension. When a tournament session is aborted, the segmentState will be forced to segmentEnded.

FIG. **82** is a diagram showing the command structure of the Bally G2S tournament class. These are the commands available in the software class to support Bally Alpha Gaming machine floor tournaments.

FIG. **83** is a diagram showing the tournamentInfo command of the Bally G2S tournament class. The tournamentInfo command is used by an EGM to send the tournament session configuration data to a host. The tournamentInfo command is sent in response to the setTournamentInfo and getTournamentInfo commands. According to one embodiment, multi-segment tournaments may be configured on the tournament system thereby providing maximum flexibility to configure any combination of tournament game themes into a single tournament session.

FIG. **84** is a screenshot of the "normal" mode page on the master Tournament Management Interface. This screenshot is displayed to the casino administrator when the associated EGMs on a casino floor are in a non-tournament mode.

FIG. **85** is a screenshot of the "preparation" page on the master Tournament Management Interface. On the "preparation" page, the EGMs are prepared for tournament mode. A countdown to the reconfiguration of the EGMs is also shown on the "preparation" page. Also, the "preparation" page shows the EGM's with active gaming machines and the number of machines with credits being played. This screen allows the gaming devices to be disabled (i.e., unable to present normal mode game) while some gaming machines are still being played by patrons. Optionally, the EGM's may be forced to disable and go into tournament mode. According to one embodiment, forcing an EGM to display will cause the EGM to cashout any credits and disable the EGM's peripherals including the Bill/Ticket acceptor. Optionally, a notification message may be sent to (and presented on) the EGMs once the EGMs are disabled and turned into tournament mode.

FIG. **86** is a screenshot of the "disable" page on the master Tournament Management Interface. The "disable" page allows the EGMs to be randomly assigned to various players for a tournament. Alternatively, the EGMs may be configured to allow a player's choice of EGM. Additionally, a message that is presented on the EGM may be created on the "disable" page. For example, the message may be instructions to the player prior to the start of the tournament. Additionally, a list of tournaments is also displayed on the "disable" page. From this page, the listed tournaments may be edited, selected, or displayed.

FIG. **87** is a screenshot of the "Enroll" page on the master Tournament Management Interface. The "Enroll" page allows the tournament enabled machines to be enrolled by specific players on the various gaming machines. The play-

ers' names or aliases appear on each EGM as they are assigned to the player. The "Enroll" page also presents information, such as the session start time, duration of the tournament session, and the list of players eligible for the session and not yet enrolled. Additionally, the tournament administrator may register players on the "Enroll" page. As shown in FIG. **87**, the tournament game play is permitted once the "Start Session" button is activated. Once the "Start Session" button is activated, each EGM is sent a "Start Tournament" command to activate the "play" or "spin" button on the EGM. Accordingly, the players may begin play of the tournament and begin accumulating their tournament score.

FIG. **88** is a screenshot of the "Play" page on the master Tournament Management Interface. The "Play" page provides the tournament host with the tournament scores as the tournament progresses. As shown in FIG. **88**, the status of each EGM (playing or no player) is presented on the "play" page. Additionally, the rank, player name, player ID, and player score is also presented with each EGM. For example, EGM **07** is being played, in rank position **1** with a score of 25,000. EGM **07** is being played by M. Green having a casino patron ID of 765221. As shown in FIG. **88**, the time remaining in the tournament session is also provided on the "play" page. With this information, casino personnel may announce the time remaining over a public address system. Additionally, the tournament status and leader board may also be presented on other casino web portals and/or overhead signage in communication with the tournament server.

FIG. **89** illustrates an APPLE IPHONE running the Tournament Management Interface. As those skilled in the art will appreciate, any similar handheld device may be used. The handheld device may be carried by casino personnel to administer and run the floor tournaments. The application data may be web page driven content or a dedicated application installed on the IPHONE with connections provided to the master tournament server.

FIG. **90** illustrates a Server-Based Gaming network architecture that supports tournament gaming on a casino floor. The network supports both Bally Alpha gaming machines, Bally iVIEW gaming machines, as well as Bally Sign Studio (which controls tournament-related signage). The network includes game content, browser content, a download and configuration server, a system game server, a control panel (backend user interface), a browser manager, Slot Management Servers (SMS), Casino Management Servers (CMS), advertisement servers, a tournament server, a game support server, and third party support servers. The Bally Browser manager supports tournament and non-tournament related data shown on the Bally Alpha gaming machines, Bally iVIEWs, and signage throughout the casino property.

Referring now to FIG. **91**, an embodiment of a Tournament Maker system, this system has a similar configuration to the previous architectures. The API (application program interface) is updated to enable a game to display the leader board instead of the server driving the leader board via the browser. Communication between the gaming machines and the host are performed using BNG (Bally Game Network) protocol instead of G2S protocol. Most of the message structures remain the same. For example, the names, purposes, and meaning of messages remain the same. However, one logical change is that optional parameters are now always included to avoid bugs caused by the optional parameters in XML.

Leader board broadcasts, which were originally defined for the G2S design (but were not implemented), are included in this design configuration. In this regard, the tournament server sends leaderboard messages via UDP broadcasts, but this functionality is hidden by the BNG transport layer (i.e., automatic). The other messages re-use much of the implementation from the previous design configuration. In this regard, the BNG Tournament module also reuses implementation components from the G2S design for validating tickets of player registration. Additionally, Tournament Meters, TournamentMgr, and TournamentClientInterface remain unchanged. Moreover, functionality for BrowserWindow is removed since all display responsibility is now handled by the game.

In one embodiment, the majority of the modifications to the design configuration are in files currently called G2STournament.h and G2STournament.cpp in a directory called /agp/os.version/servers/gamemgr/bld/SysCommMgr/G2S/. Code from these files is copied to /agp/os.version/servers/gamemgr/bld/SysCommMgr/BNGTournament/. The classes G2STournamentVoucherin, G2STournamentClient, and G2STournament are separated into files and renamed BNGTournamentVoucherIn, BNGTournamentClient, and BNGTournament. The implementation of these classes is also separated into three .cpp files accordingly.

In one embodiment, the BNG Tournament object preferably is instantiated by SysCommMgr, and does not inherit from ISysComm or other SysComm related interfaces. With respect to Message Generation, BNG message objects are created instead of G2S message objects. With respect to message handling, the BNG registration and dispatching mechanism are used for dispatching incoming messages to the appropriate handlers.

Referring now to FIG. **92**, a Tournament Administration System **9200** is shown. In one embodiment, the Tournament Administration System **9200** may increase the tournament capabilities that are provided by the Alpha platform by leveraging and extending the Alpha platform's capabilities. In some embodiments, legacy game content may be used in a tournament context. The inclusion of the tournament capability does not affect the conventional mode operation or accounting for the electronic gaming machines (EGM).

In one preferred embodiment, the Tournament Administration System **9200** is a web-based application that is responsible for tournament management including tournament creation, tournament play, patron registration, patron management, tournament reports and winner identification, all from a single point of administration. In some embodiments, the Tournament Administration System **9200** may utilize plasma displays to post leader boards and advertise upcoming tournaments or tournament marketing content.

Additionally, the Tournament Administration System **9200** can provide supporting functionality in case of communication failure, power loss or machine malfunction. Specifically, the Tournament Administration System **9200** has the ability to resume tournament, continue play, as well as is able to re-register the patron for different tournament sessions. If no tournament sessions are available or if the patron does not want to play, then the enrollment fee is refunded. The system may also ensure verification of the patron's score.

In some embodiments, the Tournament Administration System **9200** also implements functionality to support (1) patron prize management, (2) multi-tournament, multi-session play, (3) game count and sprint tournaments, (4) multi session servers, driven by an administration server playing the same tournament. Top patrons may be selected from the administration server's scores.

The Tournament Administration System **9200** further provides the following features: (1) Implementation of user management to add/edit/delete user account, assign user to one or more pre-set security group, enable/disable the account, reset password, unlock the account; (2) Recording of user activity

with information like activity date/time, username and activity details (i.e., Tournament "Monday's Tournament", Player "big guy" registered, Player "slot king" is deleted, user account "xyz" created); (3) Providing a user interface form that adds default messages, applied in preparation, disabled, and enrolled mode messages; and (4) Providing a user interface form to manage tournament default settings to total sessions allowed, total EGM's, default start time of the tournament and duration of the tournament. These settings shall be applied as default values in a new tournament creation form.

In one non-limiting embodiment, the Tournament Administration System **9200** includes, by way of example only, and not by way of limitation: Windows Server **2003** (or better), SQL Server DB (or better), and C# .NET framework (or better). The system **9200** may be used as a "Single Site—Single Session" or as a "Single Site—Multi Session" server. Additionally, the Tournament Administration System **9200** facilitates enrollment voucher creation and management as well as patron registration and 'offline' tracking card support with magnetic strip readers. With respect to tournament configuration, the system **9200** supports multi-session tournaments (e.g., running a tournament to allow patrons to play five sessions with twenty tournament gaming machines and 100 entrants). In another embodiment, the system support multi-tier tournaments (e.g., where a patron must win the first session to qualify for the next round). The Tournament Administration System **9200** also provides tournament scheduling capabilities.

In an example gaming environment, the casino floor has the Tournament Session server installed and connected to the Tournament Administration System **9200**. Preferably, at least one super user group account is created during system installation and set up of the system. In one embodiment, predefined security groups are also created in an active directory.

Tournaments may be created by the Tournament Administration System **9200** with provision to specify: Name of tournament, total players, total sessions, total gaming machines, tournament date, session duration, and tournament pay table. Each session may be provided to specify the corresponding session start date and time. Preferably, the system **9200** provides an option for a tournament to allow players to play for multiple sessions or for any one tournament session. Additionally, the system **9200** provides options to create tournaments from available tournament templates. User interface forms for creating tournament templates, as well as managing templates also may be provided by the system. In one embodiment, tournaments that are created by the system are maintained in a pending state until approved by the user who belongs to an appropriate approver security group. Players are only allowed to register and play approved tournaments.

As mentioned above, the Tournament Administration System **9200** provides a user interface form to view tournament details based on tournament states pending, approved, completed and archived. Only pending and approved tournaments are be provided with the option to delete tournament details. Preferably, for completed tournaments, the system displays the leader board results in report format with print functionality. In one embodiment, the system **9200** changes the gaming machines from conventional game play to tournament game play by transitioning through various modes like Normal, Preparation, Disabled, Setup, Enroll, Play and Results, each of which are described further below. For example, in the Disabled mode, the system displays all gaming machines connected to the tournament system along with status and seat number. In the Setup mode, the system provides the option to select approved tournament and session to play. In the Enroll mode, the system **9200** displays the player's information enrolled into the system by using their printed vouchers.

In one embodiment, the Tournament Administration System **9200** displays the tournament game results (leader board) in Results mode with details such as: player alias, position of player, seat number and player score. The functionality to modify the completed tournament session scores is also provided by the system. Preferably, the Tournament Administration System **9200** enables a user to mark a player score as incomplete if a communication loss or power failure occurs in one or more of the gaming machines during tournament play. Moreover, the system **9200** enables scores to be modified for tournaments completed within the last thirty days.

With respect to another aspect of one embodiment, when using the Tournament Administration System **9200**, players are registered to one or more sessions of the approved tournaments. Further, vouchers are printed after registration which would be used to insert into the bill validator of the gaming machines when the system is in Enroll mode. Additionally, the Tournament Administration System **9200** is capable of un-registering a registered player, as well as reprinting vouchers for a registered player. Reprinted vouchers contain new voucher bar code numbers and make previous vouchers invalid. Preferably, the register, un-register and reprint user interface forms employ card swipe functionality to read the player's card details. Additionally, the system displays player's details if corresponding player's information is found in an administration database. The Tournament Administration System **9200** also enables management of player's information with actions to support add, edit, delete and view player's information (e.g., the player's first name, last name, and alias and member ID). Further, the player's information may be imported from an EXCEL file which copies the player's data to an administration database.

In another aspect of one embodiment, the Tournament Administration System **9200** employs user management capabilities which include: add a new user account, edit user account, delete user account, assign a user to one or more pre-defined security groups, enable/disable a user account, reset a user account password and unlock a user account. User account and security group information is stored in Microsoft Active directory. Moreover, the system **9200** records user activity with information like activity date/time, user name and activity details (e.g., Tournament "Monday's Tournament" created, Player "big guy" registered, Player "slot king" is deleted, user account "xyz" created).

The Tournament Administration System **9200** uses UI form to add default messages to be applied in preparation, disable and enroll mode messages. The system **9200** also uses UI form to manage tournament default settings for total sessions allowed, total gaming machines, default start time of the tournament and duration of the tournament. These settings are applied as default values in the new tournament creation form.

In still another aspect of the Tournament Administration System **9200**, reports are maintained regarding several tournament parameters, including by way of example only, and not by way of limitation: reports to view or print tournament player registration details based on from date, to date and tournament name; reports to view or print tournament scores based on from date, to date, tournament name and session; reports to view or print tournament details based on from date, to date and tournament name; and reports to view or print completed tournament results based on the tournament selected. This report is generated from view tournament UI form.

The system is protected with user ID and a password for user authentication to UI forms. Based on logged-in user security group(s), menu links are generated dynamically. The system implements SSL secure communication for the Administration web application. The system displays "My Profile" UI form with logged in user account information. Maintain tournament Administration system data in database. The system maintains user security information in the Active directory configured on the Administration server. The Administration server is the central storage of user security information for the entire tournament system. The session manager GUI application communicates with the Administration server for user authentication.

The system implements the following security groups: (1) Super user group (full access); (2) Administration User group (user management); (3) Player Administration group (player registration, manage players and player reports); (4) Operator group (manage and runs tournaments, player registration and manage players); (5) Planner group (manage tournaments, manage templates and tournament reports); (6) Reporter group (tournament and player reports); (7) Approver group (approve tournaments, manage tournaments and tournament reports); and (8) Configuration group (configuration in SessionMgr).

In another aspect of one embodiment, the Tournament Administration System **9200** may be used to support player prize management, support a multi-tournament, multi-session play event, supports a game count and sprint tournaments, or support multi-session servers, driven by an admin server playing the same tournament event. In one such embodiment, players would be selected from all the session server's player's scores.

With respect to FIG. **93**, an embodiment of a Tournament Session Server **9300** and transport communication with gaming machines **9310** is now described. In one preferred embodiment, the Tournament Session Server **9300** enhances the existing G2S classes (including tournament classes) to message stream classes. Preferably, the Tournament Session Server **9300** acts as a link between the Tournament Administration Server **9320** and the gaming machines **9310**. Tournament Session Server **9300** may be deployed on a windows server (or equivalent thereof) and may be hosted in a data center-type server room with minimal human interaction.

Referring now to FIG. **93**, an overview of a Tournament Session Server **9300** implementation is shown. In one embodiment, the Tournament Session Server **9300** registers with Tournament Administration Server **9320**. Upon successful registration, the Tournament Administration Server **9320** is able to send tournament messages to gaming machines via the Tournament Session Server **9300**. Preferably, the Session service **9330** and the Session GUI **9340** uses the Session database **9350** for data storage.

In one embodiment, the Tournament Administration Server **9320** and the Tournament Session Server **9300** are deployed on the same server machine. Preferably, the transport libraries use pre-configured socket ports for communication using UDP and TCP. In another aspect of one embodiment, the Session service **9330** registers with the library to send and receive messages to gaming machines **9310**. Preferably, the transport library does not store any data to the Session database **9350**.

In still another aspect of one embodiment, no changes are made to the Administration Server **9320** components or the Administration Server protocol. In one specific, non-limiting embodiment, the Session GUI application **9340** is targeted for IE browser version 5.5 or higher. Preferably, the Session GUI **9340** is accessed from a terminal which is connected to the same Ethernet network of Session Server **9300**. Session GUI **9340** is deployed using Microsoft smart client architecture. On initial use, libraries are downloaded and installed onto the user terminal.

In one embodiment, the Session service **9330** is responsible for sending and receiving messages to gaming machines **9310**. Furthermore, a Tournament Message Library (message stream class format) is included in the Session service **9330** along with transport libraries.

Referring to the Message Library, the Tournament class messages are converted to message stream class format (e.g., Tournament BNG). As part of this conversion of messages to Message stream classes, a new library, "HostMessageLib," is created. In one specific, non-limiting embodiment, the messages are added to this library using namespace "XXX.Systems.ATS.Session.Messages." Preferably, each message is added to each class file for easy code maintenance. Continuing, the "Basecommand" class and Xml attributes "AnyAttr" are not required in Message stream classes. Additionally, in one embodiment, "0" is used as command identification for all "GetCommanId( )" methods (e.g., playerData and leaderData which are used in messages). Moreover, a "Common.cs" class file is created and added with all of the enumerated types, which is a data type consisting of a set of named values called elements. Further, the optional fields specified (e.g., "egmNumberSpecified", "pointsSpecified") are removed in the Tournament class. Of course, if there is an essential need for this type of field in a particular embodiment, the filed may be added. Finally, a base class, "BaseClass.cs," is created and added with all the base class attributes and would be inherited in all messages.

The following tables list the commands contained within the Tournament class into request-response pairs.

Commands originated by the Host:

Request	Response
SetTournamentState	TournamentStatus
GetTournamentStatus	TournamentStatus
SetTournamentInfo	TournamentInfo
GetTournamentInfo	TournamentInfo
SetDisplayMessage	TournamentStatus
SetTournamentPrepMode	TournamentStatus
SetTournamentMode	TournamentStatus
SetSessionState	TournamentStatus
SetSessionSuspend	TournamentStatus
GetTournamentGameDeviceList	TournamentGameDeviceList

Commands originated by the gaming machine:

Request	Response
SegmentEnded	No response required
ValidatePlayerId	PlayerIdInfo
PlayerIdStatus	No response required
TournamentEvent	TournamentEventAck
CommsOnline	No response required

Commands Originated by Host Using the UDP Broadcast:

Request	Response
SetLeaderDataList	No response required

In another aspect of one embodiment, the Session service **9330** registers with the library for connect, disconnect, and internal message events. Additionally, the Session service

9330 has to register the Tournament messages. Furthermore, the library raises an internal message event when any tournament message is received from clients.

In one embodiment, the G2S host and all dependent components (e.g., G2S Web service, G2S host, Connection Point Manager, Certificate web service, G2S host Core and Meter databases, and Message queues between session service, G2S host, and G2S web service) are removed from the session server. G2S (Game to System) is an open standards protocol for the casino gaming industry to allow gaming machines to communicate with back-office management systems. The G2S protocol was developed by the Gaming Standards Association (GSA), a consortium of manufacturers and operators in the casino gaming industry.

In one embodiment, the leader board data updates to the RAM disk file is disabled since a leader board website does not use this data. Preferably, the overhead data updates and overhead message queues are disabled, which are used for communication between the session service and the overhead control applications. Continuing, the overhead message library "DisplayLib" and G2S message library "G2SMessageLib" are removed from the Session service **9330**. In this regard, all the corresponding code which uses these libraries has been removed or updated as needed. Additionally, the "SetLeaderDataList" message is sent to the connected gaming machines **9310** using UDP broadcast.

In another aspect of an embodiment, a leader board website, which was used to display leader board content on a gaming machine top box and overhead displays, is disabled or removed since the tournament games control and provide content on the gaming machines top display and overhead displays. The Session service **9330** sends the leader board data using tournament messages to the operating system of the gaming platform, which would forward the data to tournament games.

In one embodiment the overhead control application is disabled or removed since the Tournament games control the overhead display and provide content directly. With respect to Session GUI **9340**, the overhead control status, set up forms, and leader board forms are removed or disabled from Session GUI. Preferably, no modifications are done to database **9350**. Moreover, the Session service **9330** installation removes the G2S related files and adds transport libraries and Tournament message library "HostMessageLib".

In an aspect of one embodiment, the tournament class includes commands and events related to tournament mode activity available on a gaming machine. Gaming machines may be configured for dedicated tournament use, or may serve as both conventional gaming machines and reconfigured for tournament use as needed.

In one embodiment, tournament game play does not enable real monetary currency to be accepted, dispensed, transferred, wagered, or won. In such an embodiment, tournament game play uses pseudo credits for wager and accumulates pseudo credits won in a kitty meter. In one simplicity embodiment, tournaments are run with a fixed starting number of pseudo credits to wager. The tournament winner is determined from the player with the most pseudo credits in their kitty meter. In other embodiment, more elaborate configurations of tournament play are employed.

After a tournament has been completed, the tournament may be cleared and the gaming machine may wait for the start of a new tournament session, or the gaming machine may be returned to conventional mode. Further, restrictions to tournament play may require that the gaming machine not allow conventional mode accounting meters to be altered from tournament activity. One possible exception to this rule is that security based event counters (doors, power-fail, and the like) are still be correctly updated, regardless of conventional mode or tournament mode play.

In another aspect of one embodiment, tournaments are operated in sessions, where a player may start tournament play and continue until the session ends. When a tournament session ends, the results for that tournament session are recorded and compared against competing player's results. In some cases the competing players may play at a different gaming machine from the first player, and in parallel with the first player's tournament session. Alternatively, the same gaming machine may be used successively in different tournament sessions, and the results may be compared after all players have had completed their sessions. A tournament segment is defined as an interval where a game combination is established with segment-starting parameters, then played by the player until the segment-ending condition has been met. All tournament segments operate within the context of a tournament session.

A tournament session is defined as a series of one or more tournament segments, with additional parameters to establish session-starting parameters and session-ending conditions. In an event where a session-ending condition occurs in the middle of a segment, the segment is terminated so that the session can properly end. Additionally, a session may be terminated by an attendant, operator, or via commands from a tournament class owner host. In one embodiment, tournament sessions are controlled via a sessionState, with the tournament sessionState having well defined transitions. The tournament sessionState transitions are illustrated as shown in FIG. **94**.

In an aspect of one embodiment, a tournament segmentState is a sub-state of the tournament sessionState, effectively providing detailed information about the segment while the tournament sessionState is 'sessionActive'. In the event that the tournament is suspended, the segmentState continues to reflect the state of the segment immediately before the suspension. If the segmentState is 'segmentPlaying' when the tournament resumes from suspension, then the segmentState is forced to 'waitOnPlayerStart'. This action causes the player to resume the segment from the point which the tournament session was suspended. All other segmentStates are unaffected when the tournament session resumes from suspension. When a tournament session is aborted, the segmentState is forced to segmentEnded, as shown in FIG. **95**.

Game Combinations

The protocol associates three primary attributes with each game combination (combo) offered by a gaming machine, which are theme, paytable, and denomination. The theme of the game, may be, for example, red-white-blue, super sevens, and the like. A paytable includes algorithms used to determine the payouts from the game. A paytable includes at least one wager category. Denomination is the value of each credit wagered as part of the game.

Theme and paytable identifiers are assigned by the manufacturer of a gaming machine. The first three characters of these 32-character identifiers are the manufacturer Id that GSA assigned to the gaming machine manufacturer. The fourth character is an underscore ('_') character. The remaining 28 characters are assigned by the manufacturer to uniquely identify a theme or paytable. This standard is in place so that the theme and paytable identifiers found within gaming machines are globally unique.

Denominations are expressed in the minor unit of the gaming machine base currency. For example, if the base currency is United States dollars, then the denominations would be expressed as cents. Typically, depending on the gaming

machine base currency, there is an implied decimal place to convert from the minor unit to the major unit of the currency.

The Tournament protocol groups the theme and paytable into an object called a gamePlay device. The object groups the game configuration, accounting meters, and recalls information referenced via the gamePlay device. The gamePlay device may support more than one denomination. Therefore, both a gamePlay deviceId and a denomination are required to adequately address a game combination.

Tournament Meters

In an aspect of one embodiment, tournament game play does not alter any accounting meters referenced from the conventional mode game play; however, a dedicated set of tournament accounting meters exists to accumulate tournament accounting information. The tournament accounting meter set consists of session meters and segment meters. The session meters are reset when a new tournament session is started, and they are persisted until the start of the next tournament session. The segment meters are reset at the start of each segment, and they are persisted until the start of the next segment. In general, the session meters will contain the accumulation of the segment activity. The tournament accounting meters are accessible via the TournamentEvent class.

End Conditions

In another aspect of one embodiment, the end conditions for a session may be specified explicitly; however, there is an additional end condition implied for when all tournament segments have completed. The tournament session end conditions are checked against the tournament session meters. Similarly, the tournament segment end conditions are checked against the tournament segment meters. The tournament segment end conditions should be evaluated at the end of each game cycle, with the tournament session end conditions evaluated immediately after the tournament segment end conditions.

Session and Segment Durations

In one embodiment, the tournament initialization provides for both session durations and segment durations. These values limit the time that the session or segment may be played. The count-down timers used to manage the durations may only operate when the sessionState=sessionActive and the segmentState=segmentPlaying. The countdown timers must stop and hold whenever the current states do not reflect sessionActive and segmentPlaying.

Request-Response Pairs

The following tables organize the commands contained within the tournament class into request-response pairs:

TABLE 1

Commands Originated By Gaming Machine

Request	Response
segmentEnded	No response required.
validatePlayerId	playerIdInfo
playerIdStatus	No response required.
tournamentEvent	No response required.
commsOnline	No response required.

TABLE 2

Commands Originated By Host

Request	Response
setTournamentState	tournamentStatus
getTournamentStatus	tournamentStatus

TABLE 2-continued

Commands Originated By Host

Request	Response
setTournamentInfo	tournamentInfo
getTournamentInfo	tournamentInfo
setDisplayMessage	tournamentStatus
setTournamentPrepMode	tournamentStatus
setTournamentMode	tournamentStatus
setSessionState	tournamentStatus
setSessionSuspend	tournamentStatus
setLeaderDataList	No response required.
getTournamentGameDevices	tournamentGameDeviceList

When a host receives a BNGLoginrequest command from a gaming machine, the host MUST assume that the device configuration may have changed. For this reason, when a BNGLoginrequest command is received, a host MUST request the current tournamentStatus from the gaming machine.

baseClass

This baseClass is inherited for all the Tournament class commands.

TABLE 3

baseClass

Field	Restrictions	Description
sequenceId	type: UInt64	An incrementing number to identify the command being sent or received.

setTournamentState

This command is used by a host to enable or disable the tournament device. Disabling the tournament device prevents the device from being active or started by an operator. A tournamentStatus command is sent in response to a setTournamentState command.

TABLE 4

setTournamentState

Field	Restrictions	Description
Enable	type: bool	Indicates whether the tournament device is active. true = active and false = inactive.
disableText	type: string default: <empty>	Optional message to display while the device is disabled.

tournamentStatus

The command is used by a gaming machine to send the current status of the device to a host. The tournamentStatus command is sent in response to the setTournamentState and getTournamentStatus commands. It is also sent when the value of one of its attributes changes.

TABLE 5

tournamentStatus

Field	Restrictions	Description
hostEnabled	type: bool	Indicates whether the device has been enabled by the host (true/false).
egmEnabled	type: bool	Indicates whether the device has been enabled by the gaming machine (true/false).
tournamentMode	type: bool	Indicates if the gaming machine is in tournament mode (true/false).
displayMessage	type: bool	Indicates if a display message is currently being displayed (true/false).
tournamentPrepMode	type: bool	Indicates tournament preparation mode (true/false).
sessionState	type: Uint32 enumerations: See Table	Indicates the state of the tournament session.
segmentState	type: Uint32 enumerations: See Table	Indicates the tournament segment state.
segmentId	type: Uint32	Indicates which segment is currently set within the tournament session.
errorCode	type: Uint32 enumerations: See Table 1.35	Indicates the error code corresponding to error message.

getTournamentStatus

This command is used by a host to request the current status information of the device. The tournamentStatus command is sent in response to the getTournamentStatus command. The getTournamentStatus command has no additional fields.

getTournamentInfo

This command is used by a host to request the tournament configuration information of the device. The tournamentInfo command is sent in response to the getTournamentInfo command. The getTournamentInfo command has no additional fields.

tournamentInfo

This command is used by a gaming machine to send the tournament session configuration data to a host. The tournamentInfo command is sent in response to the setTournamentInfo and getTournamentInfo commands.

TABLE 6

tournamentInfo

Field	Restrictions	Description
tInfo	type: Tinfo default: <empty>	Tinfo type is used in tournamentInfo and SetTournamentInfo classes. See table 1.7.

TABLE 7

tInfo

Field	Restrictions	Description
tournamentName	type: string default: <empty>	The marketing name for the tournament session.
creditsOnStart	type: Int64 default: 0	Credits added to the credit meter when the session starts.
infiniteCredits	type: bool default: false	Indicates if credits are infinite and available "on demand."
synchronizeStart	type: bool default: false	Indicates if the elapsed timer starts synchronous to the "tournamentSessionStart" command, or when the player begins play.
pauseOnDisconnect	type: bool default: true	Indicates if the tournament session must suspend when communications with owner host is lost.
displayMeters	type: bool default: true	Indicates if the gaming machine is responsible for showing tournament state meters or if an external agent will display tournament state meters. If this attribute is set to 'false' the gaming machine will only be responsible for displaying the 'credit' meter. If this attribute is set to true the gaming machine will be responsible for displaying all relevant tournament meters.
creditsWagered	type: Int64 default: 0	End the tournament session with this number of credits wagered.
zeroCredits	type: bool default: false	End the tournament session when the credit meter reaches zero.
gameCount	type: Int64 default: 0	End the tournament session with this number of game plays.
winThreshold	type: Int64 default: 0	End the tournament session when the win (kitty) is greater than or equal to this value.

TABLE 7-continued

tInfo		
Field	Restrictions	Description
duration	type: UInt32 default: 0	End the tournament session when this much time (in milliseconds) has elapsed.
segmentList	type: segment array	Identifies a game to be used in the tournament session.

TABLE 8

segment		
Field	Restrictions	Description
segmentId	type: Uint32	Identifies a game to be used in the tournament session.
creditsOnStart	type: Int64 default: 0	Credits added to the credit meter when the segment starts.
infiniteCredits	type: bool default: false	Indicates if credits are infinite and available "on demand."
synchronizeStart	type: bool default: false	Indicates if the elapsed timer starts synchronous to the "tournamentSessionStart" command, or when the player begins play.
postSegmentDelay	type: Uint32 default: 0	Specifies a delay period (in milliseconds) following each segment. The delay provides a pause for the player to see the results of the segment before moving to the next segment.
creditsWagered	type: Int64 default: 0	End the tournament segment with this number of credits wagered.
zeroCredits	type: bool default: true	End the tournament segment when the credit meter reaches zero.
gameCount	type: Int64 default: 0	End the tournament segment with this number of game plays.
winThreshold	type: Int64 default: 0	End the tournament segment when the win (kitty) is greater than or equal to this value.
duration	type: UInt32 default: 0	End the tournament segment when this much time (in milliseconds) has elapsed.
gamePlayId	type: UInt32	Used to select a specific gamePlay device.
denomId	type: Int64	Used to select a specific denomination. This denomination MUST be supported by the gamePlay device.
maxBetPerPlay	type: bool default: false	Indicates that the game MUST be played at max bet only.
numLinesToPlay	type: UInt32 default: 0	Specifies the number of lines to play.
betPerLine	type: UInt32 default: 0	Specified the bet (in credits) for each pay-line.

setTournamentInfo

This command is used by host to send the tournament session configuration data to a gaming machine. A tournamentInfo command is sent in response to the setTournamentInfo command.

TABLE 9

setTournamentInfo		
Field	Restrictions	Description
tInfo	type: Tinfo default: <empty>	Tinfo type is used in tournamentInfo and SetTournamentInfo classes. Refer table 1.7 for details.

setDisplayMessage

This command is used by host to display a message on the gaming machine. A tournamentStatus command is sent in response to the setDisplayMessage command.

A setDisplayMessage command will be pending until the gaming machine can begin displaying it or it is overwritten with another setDisplayMessage command. A message will continue to display until its messageDuration time has elapsed, or indefinitely if the message duration is set to zero. The messageDuration begins timing at the moment the message is displayed. A command with an empty messageText string will cancel any currently displayed message.

TABLE 10

setDisplayMessage

Field	Restrictions	Description
messageText	type: string default: <empty>	A message to display on the gaming machine. A null string or omitted attribute will cancel a displayed message.
messageType	type: Uint32 default: 1 enumerations: See Table	Indicates the type of the message for formatting purposes. Default value 1 indicates messageType enum item "BAL_information".
messageDuration	type: int default: 0	Time (in milliseconds) to display the message. A zero value indicates an infinite duration.
soundId	type: Uint32 default: 1 enumerations: See Table	Identifies a sound to play when the message is displayed on the EGM. Default value 1 indicates messageType enum item "BAL_noSound".

setTournamentPrepMode

This command is issued by a host to set the game preparation mode. In this mode, the gaming machine will disable once it has reached zero credits. If called when already in Tournament Prep Mode and the Tournament Prep Mode attribute is false, the gaming machine will return to conventional mode. A tournamentStatus command is sent in response to the setTournamentPrepMode command.

TABLE 11

setTournamentPrepMode

Field	Restrictions	Description
tournamentPrepMode	type: bool default: false	Set the EGM to Tournament Prep mode.

setTournamentMode

This command is used by host to set the game mode. The tournament mode can be enabled only if the gaming machine was previously in the conventional mode, or Prep Mode. Only one tournament device can put the gaming machine into tournament mode; a second tournament device must wait for the first tournament device to return the gaming machine to conventional mode before the second device can enable tournament mode. A tournamentStatus command is sent in response to the setTournamentMode command.

This command provides a mechanism to force the gaming machine to cash out before switching to tournament mode. If the gaming machine can not fulfil the cash out request, then the new game mode change will not occur.

Notably, if the gaming machine is currently in a game cycle when a setTournamentMode command is received, the gaming machine must complete the current game cycle before changing to tournament mode.

TABLE 12

setTournamentMode

Field	Restrictions	Description
tournamentMode	type: bool default: false	Set the gaming machine to tournament mode.
forceCashOut	type: bool default: true	Inform the gaming machine to force cash out if any.

setSessionState

This command is used by host to set the tournament session state. A tournamentStatus command is sent in response to the setSessionState command.

The setSessionState command is only valid when the tournament mode is enabled. There is an optional stateDateTime attribute that may be used to schedule the new session state. If no stateDateTime is provided, then the new session state is applied immediately.

TABLE 13

setSessionState

Field	Restrictions	Description
newState	type: UInt32 enumerations: See Table	The new state to assign to the session. Note:
stateDateTime	type: string	Date and time for the new session state to be set.

setSessionSuspend

This command is used by host to suspend or resume the tournament session. A tournamentStatus command is sent in response to the setSessionSuspend command.

The setSessionSuspend command is only valid when the tournament mode has been enabled." Additionally, the command is used to suspend a session as well as resume a session.

TABLE 14

setTournamentSuspend

Field	Restrictions	Description
suspend	type: bool default: true	Specifies that the tournament session MUST suspend, or may resume. (true = suspend, false = resume).

segmentEnded

This command is used by a gaming machine to send the tournament session data to a host when any tournament segment has ended. The segmentEnded command is sent when any tournament segment has ended. There is no response to segmentEnded command.

TABLE 15

segmentEnded

Field	Restrictions	Description
segmentId	type: UInt32	Identifies which segment ended.
sessionPlayerTournAmt	type: Int64	Value of unused credits remaining on the credit meter.
sessionWageredAmt	type: Int64	Value of credits wagered during the session.
sessionWonAmt	type: Int64	Value of credits won during the session.
sessionPlayedCnt	type: Int64	Number of games played for the session
sessionWonCnt	type: Int64	Number of games won for the session
sessionElapsedTime	type: Int64	Time elapsed (in milliseconds) for the session.
segmentWageredAmt	type: Int64	Value of credits wagered during the segment.
segmentWonAmt	type: Int64	Value of credits won during the segment.
segmentPlayedCnt	type: Int64	Number of games played for the segment
segmentWonCnt	type: Int64	Number of games won for the segment
segmentElapsedTime	type: Int64	Time elapsed (in milliseconds) for the segment.

validatePlayerId

This command is used by a gaming machine to send a player identification string to a Host when it becomes available. The gaming machine to validatePlayerId is playerIdInfo. A playerIdInfo command is sent in response to the validatePlayerId command.

TABLE 16

validatePlayerId

Field	Restrictions	Description
playerId	type: string	The player ID string that was evaluated

playerIdInfo

This command is used by the host to send a response to the validatePlayerId Command. A playerIdInfo command is sent in response to the validatePlayerId command. Additionally, a playerIdStatus command is sent in response to the playerIdInfo command.

TABLE 17

playerIdInfo

Field	Restrictions	Description
playerId	type: string	The player ID string that was evaluated
Alias	type: string default: <empty>	Used only if valid is true, this string is used for display purposes.
Valid	type: bool default: true	True if the playerId is both valid and approved

TABLE 17-continued

playerIdInfo

Field	Restrictions	Description
consumeCredential	type: bool default: false	Indicates if the credential device should be consumed. For example: a voucher credential may be stacked by the note acceptor.

playerIdStatus

This command is used by the gaming machine to send a response to the playerIdInfo command. There is no response to the playerIdStatus command.

TABLE 18

playerIdStatus

Field	Restrictions	Description
playerId	type: string default: <empty>	The player ID string (if any) that status is reported against.
Alias	type: string default: <empty>	An alias for the player (if any).
enrolled	type: bool default: true	Indicates if the player is enrolled at the EGM.

getTournamentGameDevices

This command is used by the host to send a request to a gaming machine to respond with all tournament game combos configured in the machine. The response of this command will be a tournamentGameDeviceList. This command contains no additional fields.

tournamentGameDeviceList

This command is used by a gaming machine to send a list of all tournament paytable game combinations configured. A tournamentGameDeviceList is sent in response to the getTournamentGameDevices.

TABLE 20

Element	Restrictions	Description
TournamentGameDeviceList Elements		
tournamentGameDeviceList	type: TournamentGameDevice array	Contains information related to a tournament enabled gamePlay device.

TABLE 20-continued

Field	Restrictions	Description
TournamentGameDevice		
gamePlayId	type: UInt32	The tournament game device Id.
gameTheme	type: string	The theme of tournament game combo configured.
gamePaytable	type: string	The paytable of tournament game combo configured.
gameMaxWagerCredits	type: UInt32	The maximum wager credits of the tournament game combo configured.
Enable	type: bool	Specifies whether the game combo is enabled or disabled (true/false)
denomIds	type: Int64 array	The denomination of tournament game combo configured.
gameRangeList	type: GameRange array	Contains a range of denomination supported by the device.

TABLE 21

gameRange		
Field	Restrictions	Description
denomMin	type: Int64	Minimum value of a denomination range supported by the game device.
denomMax	type: Int64	Maximum value of a denomination range supported by the game device.
denomInterval	type: Int64 default: 1	Interval for game denominations between denomMin and denomMax.

setLeaderDataList

This command is used by the host to send the tournament leader data to a gaming machine. The setLeaderDataList command can be sent to a gaming machine in any sessionState. Only one tournament device can accept leader data at one time. The tournament device that puts the gaming machine into tournament mode will be the only device to accept leader data.

A gaming machine or tournament display device has the final authority over if and when the leader data is displayed. The host may provide the player data in any order it wishes. This strategy simplifies updates to a subset of player data.

The Leader board includes complete player data associated with the tournament session.

TABLE 22

setLeaderDataList		
Field	Restrictions	Description
sessionState	type: UInt32	Indicates the state of the tournament session.
sessionId	type: UInt32	Indicates the tournament session number for display purposes.
segmentState	type: UInt32 enumerations: See Table	Indicates the tournament segment state.
Title	type: string default: <empty>	Contains an optional title or the tournament name for the leader data.
leaderDataList	type: LeaderData array	Contains information for player tournament data.

TABLE 23

LeaderData		
Field	Restrictions	Description
egmId	type: string	Gaming machine serial number as unique identifier of gaming machine
position	type: UInt32 minIncl: 0	Identifies the position on the leader board.
Alias	type: string default: <empty>	Contains an alias (or name) for the player.
Points	type: UInt32	Contains the player's tournament points.
egmNumber	Type: UInt32	Identifies the tournament machine that the player is playing on. (Note: egmNumber is used to facilitate the player in locating their designated tournament machine. The egmNumber is configured at the gaming machine and MUST be unique across all gaming machines).

tournamentEvent

This command is used by the gaming machine to notify the host whenever a tournament event occurs. The tournament device meters are associated with the tournament class, not the tournament devices. The tournament meters are shared across multiple tournament devices within the gaming machine.

TABLE 24

Field	Restrictions	Description
tournamentEvent		
eventCode	type: UInt32 enumerations: See Table	Indicates the event code associated to the event.
meterDataList	type: array of type meterData	Holds the array of meterData items.
meterData		
meterName	type: UInt32 enumerations: See Table	Name of the meter being used.
meterValue	type: Int64 default: 1	Indicates the value of the meter.

commsOnline

This command is used by the gaming machine to tell the host application, that communications is established between the host and the gaming machine. On every successful connection to host, the gaming machine sends this command to host.

TABLE 25

Field	Restrictions	Description
commsOnline		
emgId	type: string	Gaming machine serial number as unique identifier of the gaming machine.

Data Types

The following table lists the data types specific to the tournament class:

TABLE 26

Data Type	Restrictions	Description
tournament Class Data Types		
sessionState	type: UInt32 enumerations: See Table	Identifies the state of a tournament session.
segmentState	type: UInt32 enumerations: See Table	Identifies the state of a tournament segment.
messageType	type: UInt32 enumerations: See Table	Identifies the type of a message. Used for message formatting purposes.
soundId	type: UInt32 enumerations: See Table	Identifies a sound to play.
meterName	type: UInt32 enumerations: See Table	Identifies the name of the meter specific to Tournament class.
eventCode	type: UInt32 enumerations: See Table	Identifies the event code specific to Tournament class.
errorCode	type: UInt32 enumerations: See Table	Identifies the error code specific to Tournament class.

sessionState Enumerations

The following table lists the enumerations for the sessionState data type:

TABLE 27

Enumeration	Description
sessionStates Enumerations	
BAL_sessionIdle	The tournament session has not begun yet.
BAL_sessionEnroll	The tournament session is in the enroll state (pre-play).
BAL_sessionActive	The tournament session is active (in play).
BAL_sessionSuspended	The tournament session was active but is now suspended.
BAL_sessionEnded	The tournament session has either completed or has been terminated.

segmentState Enumerations

The following table lists the enumerations for the segmentState data type:

TABLE 28

segmentStates Enumerations

Enumeration	Description
BAL_segmentIdle	The segment has not begun yet. The game associated with the segment may be displayed, and an optional starting delay may be in effect. If the current segment is the first segment of a given session, the tournament meters values and display values will for the next session to start, not the previous session.
BAL_waitOnSyncStart	The segment has not begun yet. The game associated with the segment may be displayed; the gaming machine is waiting for a setSessionState (BAL_sessionActive) command from the host. If the current segment is the first segment of a given session, the tournament meters values and display values will be set for the next session to start, not the previous session.
BAL_waitOnPlayerStart	The segment is ready for play but is waiting for the player to initiate play.
BAL_segmentPlaying	The segment is in play.
BAL_segmentEnded	The segment has either completed or has been terminated. The last game played is still being displayed.

messageType Enumerations

The following table lists the enumerations for the messageType data type:

TABLE 29

messageTypes Enumerations

Enumeration	Description
BAL_information	Format the message as an informational message.
BAL_warning	Format the message as a warning message.
BAL_error	Format the message as an error message.

soundId Enumerations

The following table lists the enumerations for the soundId data type:

TABLE 30

soundIds Enumerations

Enumeration	Description
BAL_noSound	No sound.
BAL_information	Play a sound that indicates an informational message.
BAL_warning	Play a sound that indicates a warning message.
BAL_error	Play a sound that indicates an error message.
BAL_tournamentEnroll	Play a sound that indicates the tournament session enroll.
BAL_tournamentStart	Play a sound that indicates the start of the tournament session.
BAL_tournamentSuspend	Play a sound that indicates the tournament session is suspended.
BAL_tournamentEnd	Play a sound that indicates the end of the tournament session.
BAL_tournamentWinner	Play a sound that indicates the winner of the tournament session.

meterName (Tournament Session Meters) Enumerations

The following tournament session meters are defined for the tournament class:

TABLE 31

Tournament Session Meter Names

Enumeration	Description
BAL_sesplayerTournAmt	Amount of tournament credits on the player's credit meter. (Note: This meter is not an accumulation of segment meter activity)
BAL_seswageredAmt	Amount wagered in tournament game play within the session.

TABLE 31-continued

Tournament Session Meter Names

Enumeration	Description
BAL_seswonAmt	Amount won from tournament game play within the session.
BAL_sesplayedCnt	Number of tournament games played within the session.
BAL_seswonCnt	Number of tournament games won within the session.
BAL_seselapsedTime	Milliseconds elapsed within the tournament session.
BAL_segwageredAmt	Amount wagered in tournament game play within the current segment.
BAL_segwonAmt	Amount won from tournament game play within the current segment.
BAL_segplayedCnt	Number of tournament games played within the current segment.
BAL_segwonCnt	Number of tournament games won within the current segment.
BAL_segelapsedTime	Milliseconds elapsed within the current segment.

errorCode Enumerations

The following table lists the error codes specific to the tournament class:

TABLE 32

Tournament Class Error Codes

Error Code	Standard Error Text
BAL_TRX001	Invalid tournament configuration data received.
BAL_TRX002	Tournament game not available.
BAL_TRX003	Transaction in progress.
BAL_TRX004	Mode change failed.
BAL_TRX005	Game error.
BAL_TRX006	Illegal session state change.
BAL_TRX007	Tournament mode was already set by another device.
BAL_TRX008	Can't except leaderDataList from this device.

eventCode Enumerations

The following table lists the event codes specific to the tournament class:

TABLE 33

Tournament Class Event Codes

Event Code
Gaming Machine Disabled Tournament Device
Gaming Machine Enabled Tournament Device
Host Disabled Tournament Device
Host Enabled Tournament Device
Host Changed Tournament
Gaming Machine Changed Tournament Config
Tournament Mode Disabled
Tournament Mode Enabled
Tournament Session Idle
Tournament Session Active
Tournament Session Suspended
Tournament Session Ended
Tournament Segment Started
Tournament Segment Ended
Tournament Session Enroll
Tournament Game Play Start
Tournament Game Play Wager Change
Tournament Game Play End

Gaming Machine Disabled Tournament Device

This event is sent by the gaming machine after the tournament device has been disabled at the gaming machine.

TABLE 34

Device, Meter, Log Changes, and Related Commands

	Details
Device State Changes	tournament.egmEnabled = "false" (however, all commands functional). Evaluate(cabinet.egmState).
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

TABLE 34-continued

Device, Meter, Log Changes, and Related Commands

	Details
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Gaming Machine Enabled Tournament Device

This event is sent by the gaming machine after the tournament device has been enabled at the gaming machine.

TABLE 35

Device, Meter, Log Changes, and Related Commands

	Details
Device State Changes	tournament.egmEnabled = "true". Evaluate(cabinet.egmState).
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Host Disabled Tournament Device

This event is sent by the gaming machine after the tournament device has been disabled by a setTournamentState command issued by a host.

TABLE 36

Device, Meter, Log Changes, and Related Commands

	Details
Device State Changes	tournament.hostEnabled = "false". Evaluate(cabinet.egmState).
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Host Enabled Tournament Device

This event is sent by the gaming machine after the tournament device has been enabled by a setTournamentState command issued by a host.

TABLE 37

Device, Meter, Log Changes, and Related Commands

	Details
Device State Changes	tournament.hostEnabled = "true". Evaluate(cabinet.egmState).
Meter State Changes	None.

TABLE 37-continued

Device, Meter, Log Changes, and Related Commands	
	Details
Log State Changes	None.
Related Commands	None.

Host Changed Tournament Configuration

This event is sent by the gaming machine after the configuration options for the tournament device have been changed remotely by a host. The event must be sent after the "configuration changes applied" event is sent by the configuration device.

TABLE 38

Device, Meter, Log Changes, and Related Commands	
	Details
Device State Changes	Before applying the configuration changes and generating this event, the gaming machine must re-evaluate the tournament device and, when indicated by the new configuration of the device, enable or disabled the tournament device. If the state of the tournament device is changed during this process then the gaming machine must generate the appropriate events and perform the changes associated with those events.
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Gaming Machine Changed Tournament Configuration

This event is sent by the gaming machine after the configuration options for the tournament device have been changed locally at the gaming machine. The event must be sent after the operator commits the configuration changes.

TABLE 39

Device, Meter, Log Changes, and Related Commands	
	Details
Device State Changes	Before applying the configuration changes and generating this event, the gaming machine must re-evaluate the tournament device and, when indicated by the new configuration of the device, enable or disabled the tournament device. If the state of the tournament device is changed during this process then the gaming machine must generate the appropriate events and perform the changes associated with those events.
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Tournament Mode Disabled

This event is sent by the gaming machine after tournament mode is disabled, which implies that conventional mode is active.

TABLE 40

Device, Meter, Log Changes, and Related Commands	
	Details
Device State Changes	tournStatus.tournamentMode="false".
Meter State Changes	None.

TABLE 40-continued

Device, Meter, Log Changes, and Related Commands	
	Details
Log State Changes	None.
Related Commands	None.

Tournament Mode Enabled

This event is sent by the gaming machine after tournament mode is enabled, which implies that conventional mode is disabled.

TABLE 41

Device, Meter, Log Changes, and Related Commands	
	Details
Device State Changes	tournStatus.tournamentMode="true".
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Tournament Session Idle

This event is sent by the gaming machine when the tournament session is idle.

TABLE 42

Device, Meter, Log Changes, and Related Commands	
	Details
Device State Changes	tournStatus.sessionState ="BAL_sessionIdle".
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Tournament Session Active

This event is sent by the gaming machine when the tournament session is active, which occurs when the sessions starts or resumes from suspension.

TABLE 43

Device, Meter, Log Changes, and Related Commands	
	Details
Device State Changes	tournStatus.sessionState ="BAL_sessionActive".
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Tournament Session Suspended

This event is sent by the gaming machine when the tournament session is suspended.

TABLE 44

Device, Meter, Log Changes, and Related Commands	
	Details
Device State Changes	tournStatus.sessionState= "BAL_sessionSuspended".
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Tournament Session Ended

This event is sent by the gaming machine when the tournament session has ended.

TABLE 45

Device, Meter, Log Changes, and Related Commands

Details	
Device State Changes	tournStatus.sessionState =”BAL_sessionEnded”.
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Tournament Segment Started

This event is sent by the gaming machine when a tournament segment has started.

TABLE 46

Device, Meter, Log Changes, and Related Commands

Details	
Device State Changes	tournStatus.segmentId is updated to match the active segment, tournStatus.segmentState = ”BAL_segmentPlaying”.
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Tournament Segment Ended

This event is sent by the gaming machine when a tournament segment has ended.

TABLE 47

Device, Meter, Log Changes, and Related Commands

Details	
Device State Changes	tournStatus.segmentState = ”BAL_segmentEnded”.
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Tournament Session Enroll

This event is sent by the gaming machine when the tournament session transitions into the enroll state.

TABLE 48

Device, Meter, Log Changes, and Related Commands

Details	
Device State Changes	tournStatus.sessionState =”BAL_sessionEnroll”.
Meter State Changes	None.
Log State Changes	None.
Related Commands	None.

Tournament Game Play Start

This event is sent by the gaming machine when a game has started while in a tournament session.

TABLE 49

Device, Meter, Log Changes, and Related Commands

Details	
Device State Changes	None.
Meter State Changes	The accounting meters are updated as described in Table
Log State Changes	None.
Related Commands	None.

TABLE 450

Tournament Session Meters Affected

Meter	Description
BAL_sesplayerTournAmt	Adjusted by the initial wager for the game play activity.
BAL_seswageredAmt	Incremented to include the initial wager for the game play.
BAL_seswonAmt	Unchanged
BAL_sesplayedCnt	Incremented by one (1).
BAL_seswonCnt	Unchanged
BAL_seselapsedTime	Current elapsed time since the tournament session started.

TABLE 51

Tournament Segment Meters Affected

Meter	Description
BAL_segwageredAmt	Incremented to include the initial wager for the game play.
BAL_segwonAmt	Unchanged
BAL_segplayedCnt	Incremented by one (1).
BAL_segwonCnt	Unchanged
BAL_segelapsedTime	Current elapsed time since the tournament segment started.

Tournament Game Play Wager Change

This event is sent by the gaming machine when a game has additional wagers while in a tournament session. Notably, this event may occur multiple times after a Tournament Game Play Start event if the game enables additional wagers such as Blackjack insurance or split wagers.

TABLE 52

Device, Meter, Log Changes, and Related Commands

Details	
Device State Changes	None.
Meter State Changes	The accounting meters are updated as described in Table.
Log State Changes	None.
Related Commands	None.

TABLE 53

Tournament Session Meters Affected

Meter	Description
BAL_sesplayerTournAmt	Adjusted by the additional wager(s) for the game play activity.
BAL_seswageredAmt	Incremented to include the additional wagers for the game play.
BAL_seswonAmt	Unchanged.
BAL_sesplayedCnt	Unchanged.
BAL_seswonCnt	Unchanged.
BAL_seselapsedTime	Current elapsed time since the tournament session started.

TABLE 54

Tournament Segment Meters Affected

Meter	Description
BAL_segwageredAmt	Incremented to include the additional wagers for the game play.
BAL_segwonAmt	Unchanged.
BAL_segplayedCnt	Unchanged.
BAL_segwonCnt	Unchanged.
BAL_segelapsedTime	Current elapsed time since the tournament segment started.

Tournament Game Play End

This event is sent by the gaming machine when a game has ended while in a tournament session.

TABLE 55

Device, Meter, Log Changes, and Related Commands

Details	
Device State Changes	None.
Meter State Changes	The accounting meters are updated as described in Table.
Log State Changes	None.
Related Commands	None.

TABLE 56

Tournament Session Meters Affected

Meter	Description
BAL_sesplayerTournAmt	Unchanged.
BAL_seswageredAmt	Unchanged.
BAL_seswonAmt	Increased by the game play winnings, if any.
BAL_sesplayedCnt	Unchanged.
BAL_seswonCnt	Incremented if the game play resulted in a win.
BAL_seselapsedTime	Current elapsed time since the tournament session started.

TABLE 57

Tournament Segment Meters Affected

Meter	Description
BAL_segwageredAmt	Unchanged.
BAL_segwonAmt	Increased by the game play winnings, if any.
BAL_segplayedCnt	Unchanged.

TABLE 57-continued

Tournament Segment Meters Affected

Meter	Description
BAL_segwonCnt	Incremented if the game play resulted in a win.
BAL_segelapsedTime	Current elapsed time since the tournament segment started.

One of ordinary skill in the art will appreciate that not all tournament gaming systems and gaming devices have all these components and may have other components in addition to, or in lieu of, those components mentioned here. Furthermore, while these components are viewed and described separately, various components may be integrated into a single unit in some embodiments.

The various embodiments described above are provided by way of illustration only and should not be construed to limit the claimed invention. Those skilled in the art will readily recognize various modifications and changes that may be made to the claimed invention without following the example embodiments and applications illustrated and described herein, and without departing from the true spirit and scope of the claimed invention, which is set forth in the following claims.

What is claimed:

1. A tournament gaming system, comprising:

a plurality of gaming devices, each gaming device configured to enable concurrent play of a base game and an on-demand tournament game, wherein the on-demand tournament game is player initiated after the base game is initiated;

a tournament server in communication with the plurality of gaming devices, wherein the tournament server manages play of the on-demand tournament game, and the tournament server determines a location of active and eligible players for the on-demand tournament game;

a plurality of tournament displays positioned throughout a gaming establishment that are in communication with the tournament server, wherein the tournament server sends tournament information to the tournament displays near the location of active and eligible players of the tournament game, each player being presented with an option to select one tournament from among a plurality of tournaments after the base game is initiated; and

a tournament administration system that provides centralized tournament administration and tournament management, wherein the tournament administration system is operable to manage tournament creation, tournament play, patron registration, patron management, tournament reports, winner identification, or combinations thereof and to normalize base game scores of dissimilar games to determine tournament winners.

2. The tournament gaming system of claim **1**, wherein the base game is presented on a main display and the tournament game is presented on a secondary device having a display and a processor, wherein the secondary device is operatively associated with the gaming device.

3. The tournament gaming system of claim **1**, wherein the tournament information is a leader board of the tournament game in which the active players are participants.

4. The tournament gaming system of claim **1**, wherein the wherein the system supports management functionality in case of communication failure, power loss, or machine malfunction.

5. The tournament gaming system of claim 1, wherein the wherein the system supports resuming tournaments, continued play, and re-registration of a patron for different tournament sessions.

6. The tournament gaming system of claim 1, wherein the wherein the system supports patron prize management, multi-tournament play, multi-session play, game count, sprint tournaments, and combinations thereof.

7. The tournament gaming system of claim 1, wherein the wherein the system supports multi session servers, driven by an administration server playing same tournament.

8. A tournament gaming system, comprising:

a plurality of gaming devices, each gaming device configured to enable concurrent play of a base game and one or more player-initiated tournament games, wherein the player-initiated tournament games are selected and initiated on-demand by the player after the base game is initiated, wherein at least a first gaming device enables play of a first base game that has a first theoretical payout percentage, and wherein at least a second gaming device enables play of a second base game that has a second theoretical payout percentage;

a tournament gaming server in communication with a plurality of gaming devices, wherein the tournament gaming server manages and configures the gaming devices for one or more player-initiated tournament games; and

a tournament administration system in communication with the tournament server, wherein the tournament administration system includes a user display and a user interface having a plurality of fields for user input, the plurality of fields used to configure one or more player-initiated tournament games;

wherein the tournament administration system that provides centralized tournament administration and tournament management, wherein the tournament administration system is operable to manage tournament creation, tournament play, patron registration, patron management, tournament reports, winner identification, or combinations thereof, to present each player with an option to select one tournament from among a plurality of tournaments, and to normalize dissimilar base games to determine tournament winners, wherein calculation of each tournament score uses the theoretical payout percentage from each respective base game.

9. The tournament gaming system of claim 8, further comprising a plurality of tournament displays positioned throughout a gaming establishment that are in communication with the tournament gaming server, wherein the tournament gaming server sends tournament information to the tournament displays near the location of active and eligible players of the tournament game.

10. The tournament gaming system of claim 8, wherein the gaming devices are dedicated tournament gaming devices, a player tracking user interface having a display and a processor embedded in the gaming device, mobile gaming devices, or any combination thereof.

11. The tournament gaming system of claim 8, wherein each of the gaming devices includes a main display for presenting a base game and a secondary device for presenting a tournament game, the secondary device having a display and a processor, wherein the secondary device is operatively associated with the gaming device.

12. The tournament gaming system of claim 8, wherein the fields for user input configure player eligibility for the tournament game, duration of the tournament game, scoring methodology, award structure for the tournament game, award types, and display settings for tournament signage.

13. A tournament gaming system, comprising:

a tournament gaming server in communication with a plurality of gaming devices, wherein the tournament gaming server manages and configures the gaming devices for one or more player-initiated tournament games, wherein a player-initiated tournament game is selected from a plurality of tournament games and initiated on-demand by the player after the base game is initiated; and

a tournament administration system in communication with the tournament server, wherein the tournament administration system includes a user display and a user interface having a plurality of fields for user input, the plurality of fields used to configure one or more player-initiated tournament games;

wherein the tournament administration system that provides centralized tournament administration and tournament management, wherein the tournament administration system is operable to manage tournament creation, tournament play, patron registration, patron management, tournament reports, winner identification, or combinations thereof, to present each player with an option to select one tournament from among a plurality of tournaments, and to normalize dissimilar base games to determine tournament winners.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 9,177,445 B2
APPLICATION NO. : 12/619614
DATED : November 3, 2015
INVENTOR(S) : Vemuri et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the specification

Column 10, line 20, add --s-- to "minute"

Column 17, line 15, add --s-- to "grouping"

Column 17, line 15, delete "s" from "takes"

Column 18, line 20, replace "TYPE" with --type--

Column 21, line 28, replace "pin" with --PIN--

Column 21, line 52, delete "s" from "games"

Column 36, line 33, insert --data-- after "Biometric"

Column 36, line 54, add --s-- to "take"

Column 36, line 54, delete "s" from "places"

Column 41, line 6, insert --to-- after "access"

Column 42, line 63, replace "BUS" with --Bus--

Column 44, line 22, delete "s" from "Instances"

Column 48, line 29, delete "ly" from "previously"

Column 48, line 40, add --s-- to "account"

Column 49, line 1, replace "76" with --41--

Column 49, line 2, replace "Seven" with --7--

Signed and Sealed this
Twenty-first Day of June, 2016

Michelle K. Lee

Michelle K. Lee
Director of the United States Patent and Trademark Office

Column 49, line 49, after "available" delete "for"

Column 49, line 50, add --s-- to "game"

Column 50, line 22, replace "change" with --chance--

Column 55, line 51, replace "97" with --60C--

Column 61, line 11, replace "id" with --ID--

Column 63, line 57, replace "Game Network" with --Network Game--

Column 70, line 2, after "still" delete "be"

Column 92, line 21, replace "450" with --50--

In the claims

Column 94, line 64, Claim 4, after "1," delete "wherein the"

Column 95, line 1, Claim 5, after "1," delete "wherein the"

Column 95, line 5, Claim 6, after "1," delete "wherein the"

Column 95, line 9, Claim 7, after "1," delete "wherein the"